Community Response to Alcohol-Related Problems

A World Health Organization Project Monograph.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service • Alcohol, Drug Abuse, and Mental Health Administration

National Institute on Alcohol Abuse and Alcoholism

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Prepared By
Irving Rootman & Joy Moser
on Behalf of the Project Collaborators

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The comments herein are those of the project collaborators and may not necessarily reflect the opinions, official policy, or position of the National Institute on Alcohol Abuse and Alcoholism or any other part of the U.S. Department of Health and Human Services, or of the World Health Organization or any of the collaborating Governments.

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The listed collaborators should be looked upon as the international team responsible for the preparation of this monograph. Not only is this document based on other reports on the project, but successive drafts were prepared by the World Health Organization (WHO) project collaborators and amended according to the suggestions provided by the group as a whole. The major sources were reports for the three countries prepared by the local project teams. Other reports and documents drafted by various authors over the course of the project also were extensively used.

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) of the U. S. Department of Health and Human Services provided financial and technical assistance for the project, and their project officer, Leland H. Towle, Director, International and Intergovernmental Affairs, gave advisory assistance throughout.

The draft of the report on the first phase of the project was submitted by NIAAA to eight well-qualified reviewers. Their comments and proposals were most helpful for making the final revisions.

Within WHO, Dr. T. A. Lambo, Deputy Director-General, provided continuous support to the development of the program on alcohol problems, and Dr. N. Sartorius, Director of the Division of Mental Health, provided advice and help at all times. The collaboration with the three countries described in this report could not have been envisaged without the assistance of the WHO Regional Offices for Africa, for the Americas, and for Europe, and particularly of their Mental Health Advisers.

Many persons within the three collaborating countries contributed to the progress not only of the separate parts of the project, but of the total undertaking. The collaborators wish to record their debt of gratitude for the interest in the project on the part of the three governments. In each case, support was made available, beyond the contribution through WHO from the project funds, as well as administrative help, and excellent arrangements were made to host the working group meetings. Warm hospitality and friendship helped the participants to achieve a better understanding of the varied contexts in which the project was developing.

Invaluable support was given by the institutions responsible for the project in each country. In Zambia, this was the role of the University of Zambia, and later of the Institute for African Studies. Dr. J. Mwanza, Vice Chancellor of the University of Zambia, was especially supportive of the project, as were Dr. J. M. Kasonde, Permanent Secretary, Ministry of Health and Dr. W. C. Mwambazi, Assistant Director of Medical Services for the Ministry. In Scotland, the beginning of the unfailing interest of the University of Edinburgh Department of Psychiatry dates from the early gestational days of the project, when Professor Robert Kendell, Head of the Department; Dr. Norman Kreitman, MRC Unit of Research on the Epidemiology of Psychiatric Illness; and Dr. Martin Plant, Alcohol Research Group, gave valuable suggestions. The San Rafael Mental Health Community Center was responsible for the early development of the project in Mexico, with close collaboration not only from the staff of the center but also a large number of interested persons from many national and local governmental departments and from the academic field, brought together through the enthusiasm of the Director of the center. The Support of Dr. Ramon Alvarez Gutierrez of the International Affairs Unit of the Ministry of Health, should be recorded here, as well

as the encouragement of the former Director of Mental Health Services, Dr. Rafael Velasco Fernandez. The responsibility for the project was taken over in 1980 by the Mexican Center for Mental Health (CEMESAM), which later developed into the Mexican Institute of Psychiatry, both directed by Dr. Ramon de la Fuente, who was also Director of Mental Health Services.

A considerable debt of gratitude is owed to several other institutions and advisers that contributed to the project. In the first preliminary meeting, the advisers who later became part of the international advisory team for the project were assisted by additional participants: Miss Eileen Brooke, a long-term WHO consultant on mental health statistics and research; Dr. Kettil Bruun, of the Finnish Foundation for Alcohol Studies; and Mr. Alan Cartwright, Co-Director of the Maudsley Alcohol Pilot Project, Institute of Psychiatry, London. As the research proposal developed, Mr. Cartwright gave invaluable advice, based on his own rather similar research. He also assisted in investigating the possibilities of involving Denmark in the study, viewed then as being initiated in one country only. At this stage, the WHO Regional Office for Europe, and particularly Mr. Jens Hannibal, were most helpful in continuing the explorations. Several possible Danish collaborators showed interest in the project and gave freely of their time and advice to discuss the research implications.

Dr. Reginald Smart, Director, Program Development Research, Addiction Research Foundation, Toronto, made the first draft of the general population sample questionnaire and accompanying guidelines and participated in several of the discussion meetings. Later, with the support of the Addiction Research Foundation (ARF), he helped train one of the Mexican collaborators to carry out the data analysis.

The Alcohol Research Group of the Institute of Epidemiology and Behavioral Medicine, Berkeley, Calif., gave much assistance with data checking and analyses. Ms. T. Cameron, Ms. S. Brace, and Ms. C. Dixon made particularly significant contributions to a preliminary report on cross-national analyses drafted by two of the collaborators.

Among other consultants who assisted in the work, note should be made of Professor Michael H. Beaubrun, of the University of the West Indies, Trinidad and Tobago, whose contribution to the discussions at one of the meetings was based on valuable experience of adapting research techniques to circumstances in developing countries, as well as Professor Dwight B. Heath, Department of Anthropology, Brown University, Providence, R.I., who provided a paper on "Observational Studies into Alcohol-Related Problems".

In addition to the collaborators in the three countries selected for the project, investigators in a few other countries tried out the research tools at an early stage and generously reported their findings to WHO. Miss Marion Gillies, with Dr. Smart, tried out the population sample survey methods in Ontario, Canada, on behalf of ARF. In California, Mr. Ron Roizen and Dr. Robin Room made a pilot study of agencies dealing with alcohol problems. In India, Dr. Davinder Mohan and colleagues adapted the WHO questionnaire to carry out a sample population survey in five villages. Dr. Dennis Kelso used some of the experience of the project to carry out investigations in Alaska, which included developing community responses. The initiation of similar work in Australia among the aborigines was discussed on several occasions with Australian advisers.

Our thanks are due also to many investigators, too numerous to list, whose experience has been used in the development of the research tools for the project.

FOREWORD

In September 1976, the World Health Organization (WHO) formally initiated the project "Community Response to Alcohol-Related Problems," which was ultimately completed in March 1983. It was the first major multinational collaborative alcohol research and action planning effort ever undertaken, and involved the participating countries of Mexico, Scotland, and Zambia. Affiliated studies were conducted in the United States and Canada. The project objectives were to: assist in development of a long-term program for improving community and national responses to alcohol-related problems; develop basic epidemiological and psychosocial data in a variety of settings; and develop information on available community resources and community capability to deal with alcohol-related problems.

Because of the duration and nature of the project, it was carried out in two (overlapping) phases. Phase I resulted in a wealth of information on the patterns of alcohol consumption and alcohol-related problems, attitudes of the populations studied toward alcohol consumption and alcohol abuse, community response resources, and action plans under way to improve both national and community response to alcohol-related problems.

Phase II resulted in a set of general guidelines for use by other countries in undertaking similar research and planning studies, as well as information on followup actions taken in the three countries (Mexico, Scotland, and Zambia). During 1981, both Mexico and Zambia (Ministries of Health) held 2- to 3-day national meetings to present results and findings of the project in their respective countries and to carry out planning workshops which resulted in recommendations to national leaders for improving national and community response to alcohol problems. In Scotland, a similar meeting was held at the "community level" (Lothian Region) and a national meeting took place there in early 1983.

This monograph is produced so that the rich experience and findings from the project are available to a wide audience. The monograph is divided into three parts. Part I gives the background of the project; part II describes the experience and results of carrying it out in each of the three participating countries; and part III discusses the experience and results from an international perspective.

NIAAA's dual role as principal funding agency for the project and as a WHO Collaborating Center for Research and Training on Alcohol Problems makes it especially appropriate for the Institute to publish this monograph on behalf of WHO and the project collaborators. It is hoped that the monograph will serve as a resource for use in alcohol survey and social epidemiological research, cross-cultural research, and alcohol abuse and alcoholism program planning, implementation, and assessment. It is also hoped that it will generate further interest in the development of research and planning technology for conducting community-based alcohol studies, and will encourage new researchers and planners to enter the field.

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CONTENTS

CONTENTS(Continued)

INTRODUCTION

VOYAGES OF DISCOVERY

The writing of this monograph has set the kind of problem encountered by anyone who has recently been on exciting travels, and who later wants to share the experience with those at home. If we are coming back from one of those journeys, which for some strange amalgam of reasons has been specially and personally challenging and rewarding, there is likely to be this impulse to tell but at the time a bafflement as to how best to tell. A mere recital of the itinerary, getting out the guide book, displaying this or that little memento, showing holiday photographs that freeze and disarticulate a particular moment--presenting, as it were, the tabulated data alone--misses out or trivializes so much that was profoundly important. Those photographs are just another boring set of tourist snapshots (another run of data abstracted from the sound and smell and vibrance of the original scene), and our friends nod politely and we lose their attention. We want to tell them about the essential experience of that journey, and the stereotyped props seem only to get in the way--we want to share and convey and justify the inner sense of excitement without being alienating or overwhelming, we want to explain how small happenings and chance encounters build up to a large and changed awareness, we want to say how much and how urgently we need to go back and re-explore, and we also need to talk about how strangely different the streets and manners at home appear after that changing experience.

THE NEED TO MAKE THE EXPERIENCE PUBLIC

The analogy between the homecoming traveler and the research team, which has reached the stage of trying to write a report for others to read, centers exactly on this problem of how to make "private" experience "public," and there is of course in the latter instance an actual responsibility to meet this demand.

As a start, there can be no doubt that those who have been engaged in this project must approach the task of report writing with a very special sense of the importance of what that project was about. We shall attempt shortly to put some of the key questions that have emerged under headings; the report itself clearly specifies the goals of the project and discusses the extent to which those goals have been attained. But first it is necessary to make some brief statement as to why this project has been such a special experience for those who engaged in it--as to why the traveler believes the journey was so eminently worth undertaking.

THE PROJECT AS SHARED EXPERIENCE

The statement would no doubt be rather different for each participant, but there would be consensus in at least the following respect. The project has been a shared experience--a pooling of expertise, common planning, mutual support at every stage of field activity, shared scrutiny of the meaning of results. To this end we have met in conference rooms, exchanged papers, and corresponded, but more importantly, we have visited each others' countries, walked each others' streets, gone into homes, tasted opaque beer ladled out for us in a plastic billy-can.

It is a project that has also sought constantly to achieve partnership between scientific method and the difficult realities. In work of this sort there is always the danger that field difficulties will force a lowering of scientific standards so that in the end the results will not really be interpretable, and defensive excuses will have to be made for a product which is scientifically shoddy. We tried in this study to retain a very strict regard for the fundamental rules of scientific investigation, but at the same time to develop great flexibility in the adaptation and application of those rules. Sampling matters, but ideas on sampling that go well in an established Western city receive a jolt when it is discovered that, in a particular study area, there are no street numberings and the only feasible definition of a family unit is in terms of those who share a common cooking pot. A vital feature of our experience has therefore been the recognition that scientific methods of study bred in the groves of Academe can be of use in very different settings indeed, provided there is due modesty and willingness to listen and learn. Scientific travelers will certainly have their awareness changed in the process, and their own groves will look different at home.

What gave the project this special sense of shared endeavor (and what served so much to sharpen scientific method) was the fact that the group was primarily addressing itself to a practical task rather than an abstract debate. Engagement in that task stimulated much debate, but discussion always came back to a focus on the practical business to hand--for instance, how a research area was to be selected, how a questionnaire was to be designed, how computer facilities were to be obtained, or how transportation was to be found for interviewers before the rainy season made the going impossible. If instead of jointly engaging in research and action this group had simply sat around a table and discussed concepts and definitions, a wide measure of disagreement might have been revealed, and debate might not have yielded a very useful result. With a conjoint and practical task, however, the theoretical debate becomes far more purposeful. Questions that seemed terribly important at the earliest meeting, before any of us had gotten close to the field, were often to appear rather beside the point as experience grew, while questions that had initially been ignored were suddenly to achieve prominence. This is in no way to be interpreted as disdain for theoretical issues. We wish on the contrary to stress the importance of seeking to retain and build a theoretical perspective, but are suggesting that part of the potential richness of this type of study is the productive to-and-fro discussion between the theoretical and practical that is invited by a task-oriented approach.

In the process of sharing experience, agreement developed that an important task of the project was to identify major difficulties, even if these could not immediately be solved. Reports sometimes offer as a sort of afterthought a note or two on unresolved difficulties and further questions. An account of the problems encountered in this particular project is considered to be an essential part of this report. The project was certainly designed to answer some specific and stated questions (it was not simply a voyage of open-ended exploration), but at the outset it was realized that an invaluable contribution to the total experience would be a sharpened awareness of how questions were being wrongly asked or wrongly operationalized, and ideas on how more appropriate questions might be identified and more effectively operationalized.

So much then for a brief and general statement as to what gave this project its special coloring--the strong and continuing sense of a shared enterprise, a feeling that scientific method was flexibly finding its place and being tried and tested often in peculiarly difficult practical circumstances, a sense of the benefits which come from a task orientation, and the agreement that the task was as much to find better questions and ways of questioning as to answer questions framed within any present perceptions. We shall next look at some of the main areas of questioning which this study has pointed up, thus sign-posting detailed discussions in the body of the report.

CRUCIAL QUESTIONS THAT EMERGE

How to Organize a Complex International Project

The development of this project and its methods are described in part I, and in part III the report returns to a critical consideration of how certain aspects of experience gained from this particular project have potential relevance for many other types of international

research endeavor that aim to assist the member states of WHO. The common and fundamental question is how to collaborate with countries in carrying out their own research within their own limited resources and with the minimum of priming money and on the basis of such research to determine and develop their own community responses. A short-term injection of high technology that cannot possibly be sustained when money runs out, and which mistakenly teaches that nothing can be done without great resources, is not only useless but very damaging--it will leave behind a sense of learned helplessness.

There is no doubt that the present project was expensive in terms of meeting and travel and the visits of the project manager to cooperating countries. There is equally no doubt that if resources had not been allotted for expert social science and organizational support and frequent meetings of all participants, the necessary support, continuity, and drive could not have been maintained to develop and carry through such an immensely complex and demanding project.

We would maintain that in this pilot project the costly initial design of methodologies, and the outlay for the general building of experience, was money well spent if similar exercises in other countries learn from this work and operate on much lower budgets. That is a challenge to be taken up now. We do not yet know how the problem is to be solved, and have indeed not yet proved that it is capable of solution. We need to develop what might be called a technology of research actualization--there is pressing action research to be done in determining how national and community resources to support such projects are best to be mobilized, how countries are to work together on such issues within the seemingly very profitable model of a self-help and mutual support group, how research packages are to be prepared and translated and guidelines set up that are helpful without constraining local initiative, and how available consultant resources are most cost-effectively and sensitively to serve the needs of countries.

Bridging the Gap Between Community Research and Community Action

This is a problem that receives special discussion in part III and is referred to in each country report. But at present it is clear that the connection between research and its application to effective action may be very difficult to make. Such obstacles are not exceptional--most research on any type of social problem is more likely to be filed away on the shelves than be made the basis of program planning. Societies and communities have innate entropy, and insofar as they have capacities to change, the input of research has perhaps seldom been a change agent. We need to develop a far more insightful sense of possible natural avenues of change and the skill to work in alliance with practical possibilities--possibilities for the individual, the community, and institutions. What is needed is the development of a technology for bringing about community change.

Giving Drinking its Wider Context

The present research was drink-focused. It asked about the how and why of people's drinking, their problems, what they thought about other people's drinking, and the appropriateness of different types of help-seeking for drinking. Study resources did not allow drinking to be explored in a wider personal and social context. For instance, when interestingly it is discovered that drinking is more likely in Scotland than in the other two countries to be an activity within the family context, we do not know how the countries differ more generally in patterns and content of shared family activities. Do husband and wife in Scotland more often go for walks together, watch the television from adjacent armchairs, make joint visits to relatives, drive off to do the shopping together, than in either Zambia or Mexico? People's sensed rights to interfere if a drunken man beats his wife or a drunken stranger collapses in the street may be very much embedded in more basic cultural beliefs as to the extent to which anyone is rightly his brother's keeper. It is difficult to know how research is appropriately to be turned toward action without these drinking questions being put back into a more general framework of understanding.

Explaining Between-Country Differences

This is an issue that we have already begun to touch on above. Chapter 6 of this report focuses on a discussion of differences between countries, and properly takes a very modest view of what may be assumed on the basis of present results. Methodological issues affect comparability in many ways, and we are in any case only talking about comparisons between selected and perhaps atypical community samples, rather than between truly representative national samples.

Speculation, though, may be fruitful. We certainly need a theoretical framework that will make country comparisons possible and profitable. Whatever the theoretical constructs that are ultimately developed, they will inevitably have to relate different drinking patterns to different socioeconomic structures and different cultural traditions. It may be no accident that in the Scottish communities, with their relatively stable recent socioeconomic history and their relative wealth, people in general drink often but not great quantities at a time, younger people drink and more women drink, drinking is permitted in many situations, drinking to get "high" is not too well accepted--perhaps the seeming difference in overall profile between Scotland on the one hand and Mexico and Zambia on the other is a historical development in drinking that parallels more profound historical shifts in urbanization, wealth, and productivity. Perhaps drinking in Leith a hundred years ago would be less dissimilar than present Midlothian drinking to Mexican or Zambian patterns as we now see them.

At present we cannot obtain what we should like to get out of country drinking comparisons --not only because we do not as yet have sufficiently reliable, extensive, and comparable data, but also because we do not have the theoretical framework within which to conduct comparisons. Further exploration of these issues, though, is likely to be more than an academic luxury; it may help countries to see where their drinking stands historically, to take forewarning of likely developments in national drinking, and most hoped for with this early warning to plan interventions ahead of time (a very bold hope indeed).

READING ON

We have thus in this preface sought to say something as to why we valued the experience of working on this project, and have then outlined four questions to which we would draw particular attention. We very much hope that those who read the report will debate these questions and others which they will identify, will feel themselves actively drawn into the discussion, and in this sense themselves share in the Project. It can be difficult listening to the enthusiasm of the returned traveler, the unguarded generalizations based on not much more than touristic contact, the airing of national stereotypes. But the tale to be told here is in fact largely told by people talking about their own countries. We hope therefore that readers will find this report an invitation to share in a voyage of discovery.

Griffith Edwards
London, July 1983

PART I

BACKGROUND TO THE INTERNATIONAL PROJECT

This first part of the monograph presents the background to the project. Chapter 1 describes how it grew out of international concern about alcohol-related problems, discusses the initiation of the project and some of the considerations involved in responding to this concern, describes the development of the project including its objectives, and presents the conceptual background of the project. Chapter 2 presents the overall design of the project. As a whole, this part of the monograph provides the basis for understanding the results of the project presented in the remainder of the monograph.

CHAPTER 1

RESPONDING TO INTERNATIONAL CONCERN ABOUT ALCOHOL-RELATED PROBLEMS

ALCOHOL CONSUMPTION, ALCOHOL-RELATED PROBLEMS, AND INTERNATIONAL CONCERN

It is widely recognized that most drinkers derive pleasure from an occasional glass of beer, wine, or spirits, and may come to no harm from moderate or more frequent indulgence. Alcohol, it is argued, will ease social contacts and promote community cohesion. In many cultures, traditional ceremonies marking birth, stages in life, and death are linked to alcohol use. Religious occasions and respect for ancestral spirits may involve ceremonial drinking and libations.

Into many of these customs are built constraints on overindulgence. The man who cannot hold his liquor like a gentleman may be ostracized. In a tribal setting, alcohol may be reserved for those who have proved their manhood, and for women past childbearing age. Occasions when heavy drinking is acceptable may be infrequent and communal.

Governments are, however, expressing increased concern about problems related to alcohol consumption. One reason, no doubt, is that the availability of alcohol, through increased production or importation or both, has shown considerable growth in most parts of the world in recent decades. This trend has been accompanied by rising levels of average consumption per capita of populations. In the last 30 to 40 years, processes of modernization have affected vast areas of the world, frequently involving relaxation of social and cultural controls and accompanied by an expansion of communications and trade. A combination of these changes has often led to increases in availability and consumption of alcohol. Increases of 100 to 500 percent in per capita consumption (in terms of 100 percent ethanol) were, for instance, recorded for a number of countries between 1950 and 1975. Sociocultural changes may also account for the increased prevalence of drinking, including heavy drinking, among women and among young people.

Attempts have been made to relate trends in levels of consumption of alcoholic beverages to ensuing damage. There are strong indications (Bruun et al. 1975) that a substantial increase in mean alcohol consumption is likely to be accompanied by an increase in prevalence of heavy users in a community and that the latter have a substantially elevated risk of premature death. Closely linked with increase in mean consumption has been a rise in prevalence of cirrhosis of the liver, which is now among the five leading causes of death for adults aged 25 to 64 years in most countries for which valid data can be obtained (Schmidt 1977). The heavy burden on health services of dealing with alcohol-related problems can be inferred from reports that 20 to 50 percent of hospital beds in many countries are occupied by persons diagnosed as alcoholics and that rates are increasing. The effect of changes in alcohol intake on rates of crime, family problems, and work output are not clearly documented but likely to be important. Many governments consider that traffic accidents now constitute a leading public health problem. According to a recent report (OECD [Organization for Economic Cooperation and Development] 1978) "between one-third and one-half of fatal accidents to adults involve drivers with measurable alcohol and/or a drug presence".

Facts such as these led to the passing of a resolution at the 28th World Health Assembly, in 1975, which included a request to the Director-General of the World Health Organization to direct special attention in the future program of WHO to the extent and seriousness of the individual, psychological, and social problems associated with the current use of alcohol in many countries of the world and the trend toward higher levels of consumption, and to study what measures could be taken to control the increase in alcohol consumption involving danger to public health.

INITIATING A WHO PROJECT TO RESPOND TO THE INTERNATIONAL CONCERN

Early Proposals

The WHO project on community response to alcohol-related problems was planned precisely to address the above points in the 1975 resolution. One of the first considerations was the need to initiate a collaborative activity that could be of value to the large number of countries where the authorities have started to seek help in assessing the complexity of the causes, nature, and consequences of alcohol problems and in finding means of reducing their impact on the individual and on society in general.

The bold suggestion that WHO should embark on a complex research and action project to meet these needs was made at a small meeting of the advisers participating in an earlier WHO project on "alcohol-related disabilities" (Edwards et al. 1977) held in Geneva in August 1975. A detailed project proposal was then drafted in WHO with the help of consultants.

A first working group meeting on community response to alcohol-related problems was held in Geneva in September 1976. Its main purpose was to consider the project proposal as a whole and to make detailed plans for the first year. The participants included possible chief investigators from countries that had been approached concerning their interest in collaboration in the project, WHO staff members, consultants, and a representative of the U.S. National Institute on Alcohol Abuse and Alcoholism (NIAAA).

Following the meeting, a contractual agreement was concluded between WHO and NIAAA to carry out the project described in this report. The purposes of the project as presented in the contractual statement of work were: "(1) to assist in the initiation and development of a long-term, multinational collaborative program on community response to alcohol-related problems; (2) to develop basic epidemiological and psychosocial data in a sample of widely differing cultural and socioeconomic settings, including at least one of rapid social change; and (3) to develop information on community resources that are available and community capability to deal with alcohol-related problems in these settings."

The project was first conceived as a pilot effort, to be carried out in one country, that would design and test a package of the necessary research instruments. The rationale for such an approach was that an intensive action experiment could lead to the development of highly reliable scientific instruments for measuring and improving community problems and community response, and that the "research package" could then be used in a wide variety of settings. It was later realized, however, that premature assembly of the research package envisaged, developed in a single setting, would in fact limit its applicability elsewhere.

Multicountry Approaches

Although it was recognized that embarking on the proposed complex research effort in more than one study area would create many complications, it was decided that several countries, at different stages of socioeconomic development, should be involved.

WHO has a particularly strong responsibility to assist the least technologically developed countries, and it was agreed that one study area selected should be within such a country. A second should be chosen in a country with rapidly changing socioeconomic conditions, where low and much higher levels of development exist almost side by side. A third should be in a developed country where the production of alcoholic beverages plays an important

role in the national economy, where there is dissatisfaction with current methods of dealing with alcohol problems, but where resources for research as well as intervention are relatively abundant. Limiting the initial close collaboration to three countries could, it was felt, reduce the inevitable complications of multicountry research, whereas applying the above criteria for selection would do much to enhance the applicability of the research tools and the preliminary findings.

From the outset, it was considered necessary to approach governments that acknowledged concern about alcohol-related problems and showed a readiness to commit resources to their investigation. At least the nucleus of a local research team would need to be available to collaborate in the development of the project at national and international levels. It was expected that, where such criteria were met, there would be a willingness to become involved in considering the findings of the project and in implementing the resulting plans for an improved response to alcohol problems.

Although many countries satisfied these requirements, Zambia, Mexico, and Scotland were eventually chosen. They are not, of course, representative of the various sociocultural and economic settings in the world, but they were selected, with the agreement of their governments, as illustrating broad situations. Zambia, it was thought, would be well placed to offer its experience to other countries in the developing world where it may be of great importance to take account of the changing nature and significance of alcohol use and problems. The example of Mexico speaks to the very rapidly changing countries, where affluence and advanced technology exist side-by-side with primitive agriculture and bare subsistence. Scotland, less affluent and consuming more alcohol per capita than the rest of the United Kingdom, is beset by socioeconomic problems common to the developed world, including those areas deriving considerable financial gain from alcohol production.

Community Focus

To get a clearer picture of drinking patterns and problems and how they are currently dealt with in each country, it was considered essential to focus the research on defined areas or communities. Again, it would obviously not be possible to select areas that were strictly representative of the country as a whole, but in each case it would be important to choose communities providing valuable examples of the situation, including both rural and urban areas. It was expected that such examples would have implications not only for local action but for national action as well.

Another reason for attempting to study problems and responses to them on the level of a community, however defined within the country, was to learn whether involving key members of a community in information collection, research, and discussion of findings could lead to the planning of more adequate community responses to alcohol problems.

Since the project started, attention has increasingly turned to the need to involve indivlduals, families, and communities in ensuring their own health and welfare. Relevant strategies were discussed in Alma-Ata in 1978 by the International Conference on Primary Health Care (WHO/UNICEF 1978). Primary health care is stated in the report (p. 38) of the conference to be "a practical approach to making essential health care universally accessible to individuals and families in the community in an acceptable and affordable way and with their full participation." Health care is described as being an integral part of overall social and economic development, and emphasis is laid on the need for proper coordination between public health efforts and other sectors, such as education, antipoverty measures, and food production.

It is becoming widely accepted that individuals and families can acquire a capacity for assuming considerable responsibility for the health and welfare of themselves and the community. In the words of the Alma-Ata report, "they come to know their own situation better and are motivated to solve their common problems. This enables them to become agents of their own development instead of passive beneficiaries of development aid ... They have to acquire the capacity to appraise a situation, weigh the various possibilities, and estimate what their own contribution can be" (WHO/UNICEF 1978).

Planning for Action at the National Level

Although some of the action required for reducing alcohol problems can be carried out at the community level, much will have to be initiated centrally. National policies and programs also constitute constraints on local action. Thus, it was considered important to pay attention to national factors in carrying out a project on community responses to alcohol problems.

For example, it was felt that an important first step toward policy determination or revision would be an assessment of the current national situation on the basis of the information available. Certainly there will be a need to collect statistical evidence at the national level. In addition, account will have to be taken of prevailing economic and financial interests, and the effects of policies on employment, especially in producing areas; religious and moral forces in the community, including variations between subgroups; and existing and changing sociocultural influences affecting drinking patterns. Also, before a new policy is finalized, it is desirable to collect considerable evidence about public attitudes to drinking and whether there is a climate of acceptance of the proposals.

Linking Research and Action

Problems related to alcohol consumption have been the focus of a variety of research endeavors but, in general, each study has been concerned with only one or a few issues and few studies have attempted to forge a strong and continuing link between research and action.

From the beginning, however, it was considered essential that the project should use the wealth of available knowledge and experience for the study of a wide range of alcohol problems and of issues involved in shaping responses to them in a specific setting.

Another important consideration was that the project should have built into it the notion of a partnership between the research teams and the community study areas, with the community taking over and perpetuating the change process. It was expected that investigation of sources of information, with the help of persons in the locality representing a number of disciplines, would serve to emphasize the wide range of physical, mental and social problems related to alcohol consumption; the need for multidisciplinary support in case identification and assistance in dealing with the problems arising as well as in seeking means of prevention; and the need for collaboration between professional personnel, community and various agencies, and services in reducing the load of disabilities related to alcohol consumption.

An important reason for making the research international in scope was to promote the exchange of knowledge and experience in the design and testing of the necessary research methods and analysis and reporting of findings. As the results of the studies have become available, knowledge has accumulated on the range, severity, and extent of alcohol problems faced, and alternative ways of dealing with them in different sociocultural settings. This has laid a foundation for planning more appropriate action in each of the communities studied and also at a national level in the collaborating countries.

As has been the case in other projects, links between research and action have not been easy to forge in this project. This was partly because of limitations of time and resources, and partly because of the added pressure of developing and carrying out a complex, multiple-approach research program. However, as this monograph should make clear, some success was in fact experienced in forging these links and it is anticipated that the participating countries will continue to do so.

DEVELOPING THE PROJECT

Defining the Objectives

The discussion in the section "Alcohol Consumption, Alcohol-Related Problems, and International Concern" pointed to an increasingly widespread awareness of the possible damaging

consequences of alcohol consumption and a search for means of alleviation. Recognition of these facts led to the formulation of the objectives of the project.

The main long-term aim was to promote more adequate responses to alcohol-related problems at local and national levels. This, it was realized, would inevitably entail efforts to increase understanding about the nature of such problems, their incidence and prevalence within populations, and the variations according to a range of demographic and sociocultural characteristics. Moreover, before attempting to design more adequate responses, it would be necessary to assemble information about how responses, both formal and informal, were currently being made to the various types of problems, and to assess the impact of such responses.

It became clear that the main purpose would need to be dissected into a series of more limited but interlinked objectives. These could be defined as follows:

- to describe and measure the extent and nature of drinking patterns and alcohol-related problems;
- to describe and measure responses to such problems;
- to explore factors contributing to alcohol-related problems and responses;
- to assess the strengths and deficiencies of existing responses and to make tentative proposals for desirable changes and methods of achieving them;
- to promote interest in the development of policies focused on the prevention and alleviation of alcohol-related problems.

These were the objectives of the first phase of the project lasting from September 1976 to June 1981.

As the first phase progressed, it became increasingly obvious to the collaborators that it would be worthwhile to keep track systematically of actions related to the project taken at community and national levels in the three participating countries. It also became apparent that it would be worthwhile to attempt to codify their experiences in such a way that they might permit others to undertake similar endeavors. Accordingly, funds were sought and obtained for a second phase of the project with the following objectives:

- to develop a protocol for monitoring the implementation of community and national actions in the participating countries over an extended period of time;
- to study the process of implementation in the countries;
- to develop guidelines for the application of the methodology for community analysis and planning developed in the project to other interested countries.

This second phase lasted from September 1979 to March 1983.

Establishing Alcohol Problems Teams

From the beginning, it was recognized that the success and value of the project in each study area would hinge on the availability and dedication to the task of a locally recruited "alcohol problems team." The minimum requirements for such a team were agreed upon at the first working group meeting.

It was considered essential first to ensure the leadership of a person esteemed for their work and acceptable to the authorities in the country, who would act as principal investigator or research coordinator. An important consideration would be the candidate's expected ability to secure the interest and collaboration in the project of a variety of officials, professional staff, and communities. After discussions with the relevant WHO Regional Offices and with national authorities, tentative approaches were made to possible team leaders in five countries. The availability of appropriate persons willing to assume the role of principal

investigator was a deciding factor in the selection of the three collaborating countries. Three of the principal investigators were psychiatrists, but that was not an essential selection criterion. In the case of Zambia, a social scientist shared the role of principal investigator during a large part of the first phase of the project and another social scientist was the principal investigator during the second phase in that country.

It was appreciated that, although the principal investigators should be acquainted with the necessary research planning and techniques, their professional qualifications in this respect would need to be complemented by those of a full-time research worker. It did not prove possible to fill such a position from the beginning of the project in any of the study areas and this resulted in some complications and delays.

In Mexico, a number of psychiatrists, a sociologist, and social workers were involved in various aspects of the research. In the second year of the project, an invaluable contribution to the work was made by the Mexican Center on Mental Health (CEMESAM).[1] A full-time research collaborator from the center was seconded to the study team and organized the surveys, data processing, and analysis.

The situation in Scotland was somewhat easier, since a full-time research worker was appointed in June 1977 and a data analyst joined the team in November 1978.

The greatest difficulties were experienced in Zambia, where no continuing and reliable full-time research assistance was secured until spring 1979. From July 1978, the project came under the aegis of the Institute for African Studies to which the principal investigator and his collaborator were attached. Considerable assistance was provided by the Director of the Institute who subsequently became the principal investigator during the second phase of the project.

An essential member of any alcohol problems team is a full-time secretary who could also take over the duties of research assistant. No great difficulties were found in securing such help in either Scotland or Mexico, although in the latter, an additional burden was the requirement for typing in both English and Spanish. In Zambia, appropriate help was found after some delay.

There were some changes in personnel between the first and second phases of the project. In two of the countries (Mexico and Zambia) the principal investigators changed. There were also changes in research associates and other support staff in all three countries. These changes posed some problems in ensuring continuity, but they were ultimately resolved.

Selecting Communities for Detailed Study

The following criteria were developed for the selection of communities. It was suggested that there should be evidence of a political will for research leading to action in relation to alcohol problems; the area would not need to be typical but should not be grossly atypical; the area should be easily accessible; it should preferably be an already recognized administrative unit; it should have the character of being a community; a disturbing level of alcohol problems should have been noted; some potential for action should be present; and both rural and urban populations should be covered. It was also agreed that there should be a certain freedom of selection, particularly for the urban area, whereby either a whole city or a smaller district might be chosen for study. If a whole city were chosen, various components of the project might be carried out at different levels, either city-wide or in local areas only.

The application of these criteria in the three participating countries resulted in the selection of a variety of areas for study. In Zambia, the urban community selected was the capital city Lusaka, two areas of which, one periurban and the other suburban, were singled out for intensive investigation. The rural area selected was a Health Demonstration Zone within the Lusaka region. In Mexico, the area selected for study was the Tlalpan Delegation (District or County), whose boundary lies some 20 km from downtown Mexico City. Two communities, one urban and the other rural, within this Delegation were chosen for more

[1] This center was expanded and in 1980 became the Mexican Institute of Psychiatry.

detailed study. In Scotland, the Lothian region, comprising the city of Edinburgh together with surrounding rural areas, was selected.

Ensuring Collaboration

It is important to stress that this project was, in every sense of the word, collaborative in nature. Not only were the approaches and instruments designed jointly by the collaborators, but collaboration between the project teams and members of the local communities as well as national authorities was sought throughout.

An important means of ensuring effective collaboration between the participating countries was to hold working group meetings. Such meetings, involving country investigators, advisers, WHO staff, and investigators from additional countries, were in fact held approximately every 6 months over the life of the project. At least one meeting was held in each of the project countries.

This series of meetings proved to be critical to the overall development and monitoring of the project. It served not only to develop and streamline the research methods and compare results, but also to review the progress of the project, to plan successive stages, to resolve technical and administrative problems, to gain familiarity with the sites in which the research was being carried out, to interest neighboring countries in the project, and to strengthen local and national volition to implement strategies for improving community response.

At each meeting, considerable attention was given to specifying detailed plans and timetables. Planning sheets were than prepared specifying the tasks to be accomplished, the expected outputs, target dates, and final dates. Every effort was made to meet the target dates. The extent to which this was achieved was reviewed at subsequent meetings and the work plans were adjusted accordingly.

Visits to the participating countries by the WHO project manager served to review in detail the accomplishments and problems of the local teams, assist in the resolution of these problems, gain familiarity with the exact circumstances in which the research was taking place, meet the members of the project team not attending working group meetings, meet local and country officials involved in the development of community plans, and assist in planning of the country meetings. The preparation and circulation of monthly and other types of reports for information and comment further helped to maintain the spirit of collaboration.

Within the participating countries, agreements had to be negotiated. This required a willingness on the part of each government to support the project work in its country and to host one of the intercountry meetings necessary for the development of the project. Adherence to these conditions contributed to the national involvement and commitment to the project. The perceived support of the national governments also helped the project teams obtain support from the local communities.

It proved particularly valuable that each of the project leaders in the three countries had a strong concern with social research and community development and had already a broad network of contacts with local and national administrative personnel, as well as with persons from a variety of disciplines, willing to collaborate in the project. In some cases, such persons were drawn from other institutions in the country. For example, in Mexico, a research worker came to the San Rafael Mental Health Center from the Mexican Center for Mental Health (CEMESAM), which in 1980 became the National Institute of Psychiatry. This interinstitutional collaboration increased the resources available to the project.

Efforts were made at both the community and the national levels to interest additional persons in the project such as psychiatrists; social workers; law enforcement officers; representatives of voluntary organizations; and officials concerned with health, welfare, education and labor. This broad representation of interest facilitated the development of plans for improved community (and national) responses to alcohol-related problems.

CONCEPTUAL BACKGROUND OF THE PROJECT

The project collaborators drew on a number of lively intellectual traditions in designing the project. These included population surveys of drinking, conceptual work on alcohol-related disabilities, studies of social responses to drinking problems and barriers to treatment, orientation to reorganizing and strengthening community responses, alcohol problems in general and clinical populations, recognition of multiple agencies dealing with alcohol problems, and cross-cultural studies.

General Population Surveys of Drinking Practices and Problems

One aim of the general population study in the project, as described in the text of the report, was a quantitative description of drinking patterns and problems in the study sites, to serve mainly as a basis for planning community and national responses. In Mexico and Zambia, there had not previously been a rigorously sampled general population study focused on drinking patterns and problems. While there had been such studies previously in Scotland (e.g., Dight 1976), there had been little survey coverage of drinking problems, and there was no such study specifically for the Lothian region. Such surveys are by now commonplace in many industrialized countries. But they have been uncommon in developing countries; most knowledge of drinking in such areas is based instead on ethnographic methods. Anthropologists' attention has until recently been primarily directed at traditional village cultures rather than at the urban scene. And cross-culturally comparable ethnographic data on drinking patterns and problems are rare. The present project is thus an unusual if not unique effort to apply a common, quantitatively oriented methodology across both industrialized and nonindustrialized sites, and in both urban and rural areas.

The content of the general population study drew on a variety of antecedents from the United States, Scotland, and the Nordic countries. Questions drew on the Scottish and Nordic traditions of detailed questioning about recent drinking occasions (cf. Dight 1976; Mäkelä 1971), as well as using some summary measures more in North American traditions of questionnaire construction (Knupfer 1966; Cahalan et al. 1969).

Questions about reasons for drinking, norms concerning different drinking contexts, and drinking-related problems derived primarily from North American and English models (Cahalan et al. 1969; Jessor et al. 1968; Room and Roizen 1973; Cahalan 1970; Edwards et al. 1972a,b). The various lines of questioning were substantially adapted to the specific needs of a cross-cultural study in diverse sites.

Alcohol-Related Disabilities

An earlier WHO project, supported by NIAAA, had been concerned with "criteria for identifying and classifying disabilities related to alcohol consumption" (Edwards et al. 1977). Recognizing sociological critiques of the conceptual and practical difficulties involved in inflating the disease concept of alcoholism to cover the whole range of alcohol-related problems (see for example Christie and Bruun 1969; Room 1970; Robinson 1972; Bruun 1973), the project's report adopted the nomenclature of "alcohol-related disabilities" to cover the whole range of health and social problems related to drinking. Since the definition of "disability" was clearly influenced by culture, the report took the position that at this broader level there could be no transculturally valid single set of diagnostic criteria for alcohol-related disabilities.

However, according to the report, within this larger set of disabilities there was one "psychobiological" entity, the "alcohol dependence syndrome," which should be considered as a specific and coherent psychiatric condition. While this syndrome might present itself differently in different cultures, these different manifestations were best "interpreted as culturally, environmentally or personally patterned manifestations of the fundamental alcohol-dependence syndrome" (Edwards et al. 1977, p.10). Included in the proposals for further research were investigations of this postulate of underlying transcultural universality.

Studies of Social Responses to Drinking Problems and of "Barriers to Treatment"

As traditions of general population surveys of drinking problems developed in Britain and North America, attention was directed at what came to be called in the project "informal community responses" to alcohol-related problems. Reporting on a study which had found that only 4 of 25 "problem drinkers" identified in a household survey were known to social and health agencies, Griffith Edwards pointed to the importance of nonagency responses: "the troubled drinker exists in a society, and ... society will respond to him through the actions of varieties of important noninstitutionalized persons such as his family, his neighbors, his employers, and the man at the bus stop" (Edwards 1973a). Studies of referral services for alcoholics suggested that cases of self-referral were less common than cases in which relatives called for help (Corrigan 1974).

From a different tradition, American sociologists working on drinking surveys had long been sensitized by "labeling theory" to the fact that social problems from drinking do not reside solely in the drinker, but also in someone else's reaction to the drinking and definition of it as problematic (see for example Room 1966; Mulford 1968; Room 1973; Roizen 1973). Survey instruments began to include not only questions on actual friction with family, on the job, etc., but also vignettes eliciting attitudes on what should be done in various drinking situations leading to problems, and attitude items on popular definitions of alcohol problems, sentiments concerning treatment, and opinions on preventive policies (see Cahalan and Treiman 1976a,b; Cahalan et al. 1976; Roizen 1977). From the point of view of policy assumptions prevalent in the United States--that the appropriate response to "hidden alcoholics" was to find them and get them into formal treatment institutions--the research question tended to be defined in terms of "barriers to treatment" (Roizen 1977; Hingson et al. 1981). In this sense, the perspective tied into an older literature on popular acceptance of the disease concept of alcoholism (see Room 1972, p. 1050, footnote). But the WHO study got under way as a skepticism about this perspective was building up among clinical researchers in Britain and social researchers in the United States (Edwards 1973a; Cahalan 1976). In particular, the project drew on the experience of the "Camberwell study" in London, which had been directed at strengthening informal community responses to alcohol problems rather than at increasing clinical caseloads (Cartwright et al. 1975; Shaw et al. 1978; Robinson 1976). This commitment was strengthened by the contemporaneous WHO project focusing on means of prevention of alcohol-related problems (Moser 1980).

Orientation to Reorganizing and Strengthening Community Responses

While the specific perspective and experience of the California surveys and the Camberwell project influenced the form and content of the project's data collection, the attention to informal social responses to drinking problems and the concern to strengthen such responses, rather than to replace them with formal treatment, derived from more pragmatic and action-oriented streams of clinical and policy thinking. At the inception of the project, WHO as a whole was in the process of reorienting its program to place a stronger primary emphasis on the health needs of developing nations. In this context, there was a strong orientation to the level of "primary health care" and to developing models of health promotion and disease prevention that included a maximum degree of community self-help and a minimum of highly trained professional expertise. Concretely, the emphasis was thus on "barefoot doctors" and community organization rather than on the erection of university hospitals in capital cities.

The project collaborators agreed that the research should be oriented to eventual action, and that the needs of developing countries were hardly likely to be met by the type of complex and highly professionalized network of services for alcoholism with which developed countries such as Scotland or the United States were blessed, or perhaps burdened (Hawks 1980). Moreover, the group shared a feeling of disquiet and dissatisfaction with the extent to which treatment responses had tended to replace preventive actions and community-oriented intervention in Europe and North America.

Alcohol Problems in General and Clinical Populations

In interpreting the findings of the initial Camberwell study, which collated survey with clinical data, Edwards (1973a) had contrasted two "models" of response to alcohol problems: an "antique" one centered entirely on the alcohol clinic and a "utopian" community-centered approach. In this and a contemporaneous review of epidemiological work (Edwards 1973b), he drew not only on the Camberwell study but also on the picture of drinking problems in the general population that had been emerging from survey analyses of American data by the Berkeley group in the 1960s and early 1970s. The picture of alcohol problems in the general population that emerged from these analyses was starkly different from the classic picture of alcoholism based on clinical studies. While those treated for alcoholism in clinics were typically aged 35-60 years, alcohol problems were most prevalent in the general population among young men--at ages 18-25 years. Clinical populations showed a considerable persistence of problems over time and a cumulation of problems across a whole range of life areas (although the literature had in fact tended to exaggerate the degree of "clumping" of problems in clinical populations--Room 1970). Drinking problems in the general population, on the other hand, were often sporadic and often confined to one or two life areas. By the time of the inception of the project, the contrasting patterns were being referred to as the "two worlds" of alcohol problems, clinical and general-population (Room 1977).

The "two worlds" formulation implied a number of research questions, since it was clear that one is not born into the clinical population, but achieves it or has it thrust upon one. What is the relation between youthful alcohol problems and clinical alcoholism in middle age--to what extent and in what manner is the second population drawn from the very much larger first one? If we can speak of those in treatment for alcoholism as having been extruded from or chosen out of the general population, how do the processes of extrusion work? Under what circumstances do the informal social controls around drinking break down, and how and by whom are the more formal responses of the alcoholism treatment system and other social response agencies called into play?

Such questions had been on the research agenda of the Social Research Group, Berkeley, since the early 1970s. But it was recognized that they were difficult questions to study. The problem was often expressed in the metaphor of a telescope, as a problem of magnification. The clinical population of alcoholics is very small, compared with the adult general population: perhaps as small as 1 percent (Room 1980) even in a country well provided with specialized services. To try to study the processes by which informal responses "worked" or "broke down" from the general population framework was like looking through the wrong end of a telescope. On the other hand, to study only clinical populations, asking them how they got there, turned the magnification up too high--it excluded from the field of view all those who did not end up in the clinic. While no ideal solution was apparent, the optimum solution seemed to be a multimethod, multiframe study. This certainly would involve a survey of the general population, a survey that in addition to the usual drinking patterns and problems questions would pay particular attention to whatever could be learned about responses to drinking problems and to the sequelae--an approach imposed also by the commitment of those involved in the project to strengthening informal responses. It would also involve interviews with appropriate clinical populations, focusing both on asking questions concerning drinking practices and problems in a comparable form with the general population survey and on asking clinical cases about their history of adverse responses, referrals, treatment, etc. Other available means of getting information on the rare phenomenon of "extrusion" would also be drawn on. This would include interviewing agency personnel for what light they could shed on the process, and ideally would also involve a series of observational studies. These observational studies would be of two main types: one focusing on what happened as people came in the clinic door, i.e., observations in referral and clinical settings, and the other focusing on situations of heavy drinking where there seemed to be a good chance that the formal and informal social handling of alcohol problems could be observed. This general multimethod, multiframe approach informed the initial design of the project.

Recognizing Multiple Agencies Dealing With Alcohol Problems

It will be noted that the design just outlined presumed the existence of a clearly defined population explicitly in treatment for alcohol dependence, and that the questions it addressed

and the approaches it took were formed in the experience of developed industrial societies. During the initial discussions of the collaborators and advisers, it became clear that the model needed to take account of the very different situation with regard to social and health services in developing countries. In Zambia, there is no specialized treatment unit for alcohol dependence--merely a few cases treated in the general wards of the mental hospital--nor was there a treatment system clearly oriented to a disease concept of alcoholism in Mexico. On the other hand, in these societies what would be recognized at least by researchers as alcohol-related problems were clearly not always handled in the family or in other informal ways. The study plan had always recognized the fact of formal responses to drinking problems in other systems of social handling--the police, social work agencies, etc.--and the earlier Camberwell study had paid explicit attention to their records (Edwards et al. 1973). But the WHO study plan had initially foreseen dealing with these systems in terms of a "background information" study, by collecting and perhaps, if necessary, reanalyzing existing records and social statistics from the systems.

It became recognized that the non-alcohol-specific agencies required much closer study. For a brief time, there was still some hope that existing agency records could be drawn on the study samples of those with alcohol problems in such agencies. But the records proved uniformly inadequate for the project's purposes in both developing and developed sites. This fact not only reemphasized the importance of extending the study into other agencies, but it implied taking on new tasks. The project team in each country had first to make as exhaustive a list as possible of the potentially relevant community agencies--social, health, control, religious, and so on. On this basis, a sampling had to be made of agencies to be covered by "agency interviews" with the personnel who worked in them. As dictated by the scarcity of resources, a smaller sample had to be identified of agencies where client data could be collected. For lack of available identifying records, and with a desire anyway to check any agency decisions about whether a problem was an "alcohol problem," the collaborators took on this new task. Data had to be gathered case by case on the nature of the population served or caught by each agency, and that population had to be screened both for the presence of drinking on the occasion of the agency's involvement and with respect to longer-term drinking histories. With personnel and resources already stretched thin by the demands of the project, it was recognized that the work in what was now seen as a crucially important direction would have to be cast more as a series of exemplary pilot projects than as a definitive study.

Cross-Cultural Studies

From the first, the fundamental justification of the project was seen as its usefulness in each national and local setting and as an example for other settings of what could be done in the way of study and action to prevent alcohol problems and otherwise improve the community response to alcohol problems. But there was also a commitment to collecting the data so far as possible in a comparable fashion, to allow for some cross-cultural analysis.

Certain decisions made in the course of the project enhanced the potential strength of cross-cultural analyses of the data. These decisions occurred at crucial points in determining the design of the studies, in establishing the content of the inquiries, and in setting up the data management and analysis. Although the collective decision was to leave collaborators in each country free to deviate from a common plan as necessary to take into account local cultural differences, the collaborators frequently opted instead to follow a common path. Examples of this include the decision to choose study sites spanning a range between rural and urban areas; to use a common set of questions for most of the general population survey questionnaire; to choose agencies as sampling sites for detailed "client studies" from a common set of domains or community institutions; to code and punch quantitative data so far as possible in accordance with a common coding manual; and to construct common summary measures, for instances of drinking patterns.

In the event, detailed comparative analysis proved most feasible for the general population survey data. The extreme variation in the density of the network of community agencies, the inherent site-specificity of the patterns of formal community response, and the limited sample sizes dictated by the shortage of resources, all contributed to limiting the detail in which cross-cultural comparisons of the client studies and related data sets could be made.

The importance of cross-cultural comparisons to an understanding of alcohol problems has been recognized throughout the modern era of alcohol studies. In 1942, Jellinek assigned a high priority to a cross-cultural study that would "attempt an explanation of the absence of inebriety in certain societies or the various forms and degrees of inebriety in other societies in terms of cultural structure. The dependence of inebriety on certain basic attitudes may be revealed and, more importantly, what may be called the 'function of alcohol in society and changes in function may be clarified" (Jellinek 1942, p. 109). In the past 40 years, an enormous body of work has accumulated on cultural factors in drinking practices and problems in the anthropological literature (Heath 1976) and elsewhere. While much of this work is inherently interesting and thought provoking, the number of generalizations that can be made with any confidence about the cultural conditioning of alcohol problems has remained quite small (see for example Marshall 1979). A major reason for this is that most of the literature on cultural factors in drinking practices and problems is composed of one-culture studies, rarely presented in a form comparable with studies of other cultures.

A number of sustained attempts have been made to overcome this difficulty. One major tradition, initiated for alcohol studies by Horton (1943), draws on such cross-cultural compilations as the Human Relations Area Files in correlational tests of various hypotheses about cultural factors in drinking practices and problems, with each culture as one unit of analysis. This "hologeistic" or "holocultural" tradition may be seen as having been brought to an impasse by conflicting analyses of essentially the same materials (Stull 1975; Mäkelä 1979; Whitehead and Harvey 1974). This result may be seen as reflecting not only methodological but also conceptual difficulties, notably the strong tendency in the studies to apply theories developed in terms of individual psychology at a whole-cultural level (Mäkelä 1979). There is also considerable question about the extent to which findings from small, nonliterate cultures can be applied to complex modern nation-states--either in the developing world or among industrialized states. Furthermore, as Mäkelä has remarked concerning the holocultural tradition, "from the viewpoint of intellectual history, the rival theories are all attempts to explain American alcoholism" (1979, p. 12).

A second tradition might be characterized as a tradition of "grand qualitative syntheses," drawing on available data from various sources to make overall characterizations of the role of various cultural factors in drinking patterns and problems. At a descriptive level, there have been a number of useful essays in this line (e.g., Lemert 1962; Marshall 1979). But the most influential analysis in this mode has had more ambitious goals, drawing on a fairly small selection of case studies to argue that a presumed especially high rate of alcohol problems such as that found in the United States is due to a special cultural ambivalence about alcohol (Chafetz and Demone 1962; Pittman 1967). In recent years, however, the argument has been strongly attacked on both empirical (Mäkelä 1975) and conceptual (Room 1976) grounds. The procedure of global contrasts of cultural styles in drinking, based on disparate case studies, opens the door to widely varying interpretations of the same sets of data.

A third tradition, somewhat more scattered than the others, has been of population studies using comparable instruments in different cultural situations. Of course, any nationwide survey and most community surveys in multiethnic countries such as the United States or Switzerland comprehend a variety of different ethnicities. Long before most other epidemiological and social-science literatures, the alcohol literature was aware of the existence and importance of ethnic variation within the U.S. white population, and ethnic comparisons have long been a part of the alcohol epidemiology literature both in the United States (e.g. Glad 1947; Skolnick 1958; Knupfer and Room 1967; Room 1968; Jessor et al. 1968; Cahalan and Room 1974; Greeley et al. 1980) and in other multiethnic societies (e.g. Sargent 1973; O'Connor 1978; Wüthrich 1979).

A pioneering study in comparable cross-national alcohol research was the 1960 collaborative survey of drinking among youth in four Nordic capital cities (Bruun and Hauge 1963). This has been succeeded by a series of other joint Nordic surveys of drinking patterns, although unfortunately cross-national analyses of them have not been common (Jonsson and Nilsson 1968; Ahlström-Laakso 1975). The material has usually been confined to the comparison of drinking patterns, limiting their value in terms of the epidemiology of alcohol problems. From this perspective, other special comparative studies, drawing on the excellent Nordic alcohol-related social statistics, have been more illuminating (Christie 1965; Mäkelä and Österberg 1976).

Of special interest conceptually have been the handful of studies that have compared the same ethnicity in different national situations--O'Connor's comparative study of Irish youth and English youth in England and Irish youth in Ireland (1978), Pernanen's study of Finns and Canadians in Canada and Finns in Finland (1979), and the few ethnographic and often retrospective comparisons available for United States immigrant groups (e.g. Strivers 1976, on Irish; Gordon 1978, on Dominicans). Such studies allow us to begin to take apart the black box of "culture" into component dimensions of normative patterns, national experience, etc.

In the welter of cross-cultural and cross-national approaches and emphases, some strategies appear to have been more productive of epidemiological understanding than others. In this, as in other literature based on surveys or social statistics, there has been a surplus of flat reportage of difference in patterns, with little attention to their etiological significance. On the other hand, in the long run, the strategy of treating cross-national or cross-cultural studies as the field for testing very general etiological hypotheses has not fared well. The most productive approaches seem to have steered a middle course between these two tacks.

In line with this perspective, the data collection in the project concentrated on a dense coverage of drinking norms, practices, problems, and community responses, and of closely related issues. The aim was a rich description of how these various related areas fit together in a particular culture and, eventually, in a cross-cultural analysis, how they varied between the cultures of the study. The pursuit of these matters left little or no questionnaire time for measuring individual personality characteristics, life history, or general dimensions of attitudes. Since there was a strong interest in specifying the limits of the operation of cultural factors, there was attention to potentially competing factors: age, sex, and social class statuses; comparisons of urban with rural areas in a given country; occupational, family, and religious affiliations, etc.

FORMULATING QUESTIONS TO GUIDE DATA GATHERING

In designing the project, the collaborators, drawing from the intellectual traditions described in the last section, gave considerable thought at an early stage to what information would be helpful in developing improved responses to alcohol-related problems. While there were some differences of opinion as to what information would be of highest priority, there was general agreement that the following were among the main general questions requiring answers:

(1) How do people drink?
(2) What is the cultural definition of alcohol?
(3) What kinds of problems do people have as a result of their drinking?
(4) How do communities deal with such problems?

These questions in turn were broken down into a number of subsidiary questions that are more amenable to direct answers. For instance, the first question on drinking patterns was formulated more specifically as follows:

- How many people within a defined population drink?
- How often?
- How much?
- How often do they get intoxicated?
- What are "typical" drinking occasions like?
- What sorts of beverages are consumed?
- Where?
- Who is present?
- How long do the occasions last? and
- What are the occasions of exceptionally heavy drinking like?

It was felt that answering these questions would provide a general picture of the outer boundaries and internal variations in drinking patterns in the populations of the study communities in the three countries.

The second area of inquiry, concerning the cultural definition of drinking, subsumes questions such as:

- Why do people drink?
- Why don't they drink?
- What are the population's views about drinking and drunkenness?
- What do they consider as appropriate drinking behavior for particular types of people? and
- What do they consider as appropriate drinking behavior for particular types of situations?

The answers to these questions were expected to help in understanding how alcohol is viewed in the communities studied and what is seen to constitute deviant behavior in relation to drinking.

The item on problems led to the following kinds of more specific questions:

- What kind of troubles have ordinary people experienced in relation to their drinking?
- To what extent is drinking involved in contacts of people with various community agencies?
- What are the characteristics of people with drinking problems who come into contact with agencies? and
- How do they differ from other groups of drinkers?

The responses could be expected to provide an impression of the magnitude and nature of drinking problems in the communities studied.

Finally, the inquiry on community responses gave rise to the following questions:

- What do community residents think about treatment?
- How do they consider people should respond to episodes involving drinking?
- What kinds of responses had they themselves encountered or given to situations involving drinking?
- How do persons who provide services to people experiencing drinking problems, see such problems, and deal with them?
- What are the views of clients regarding treatment? and
- Do they differ from others?

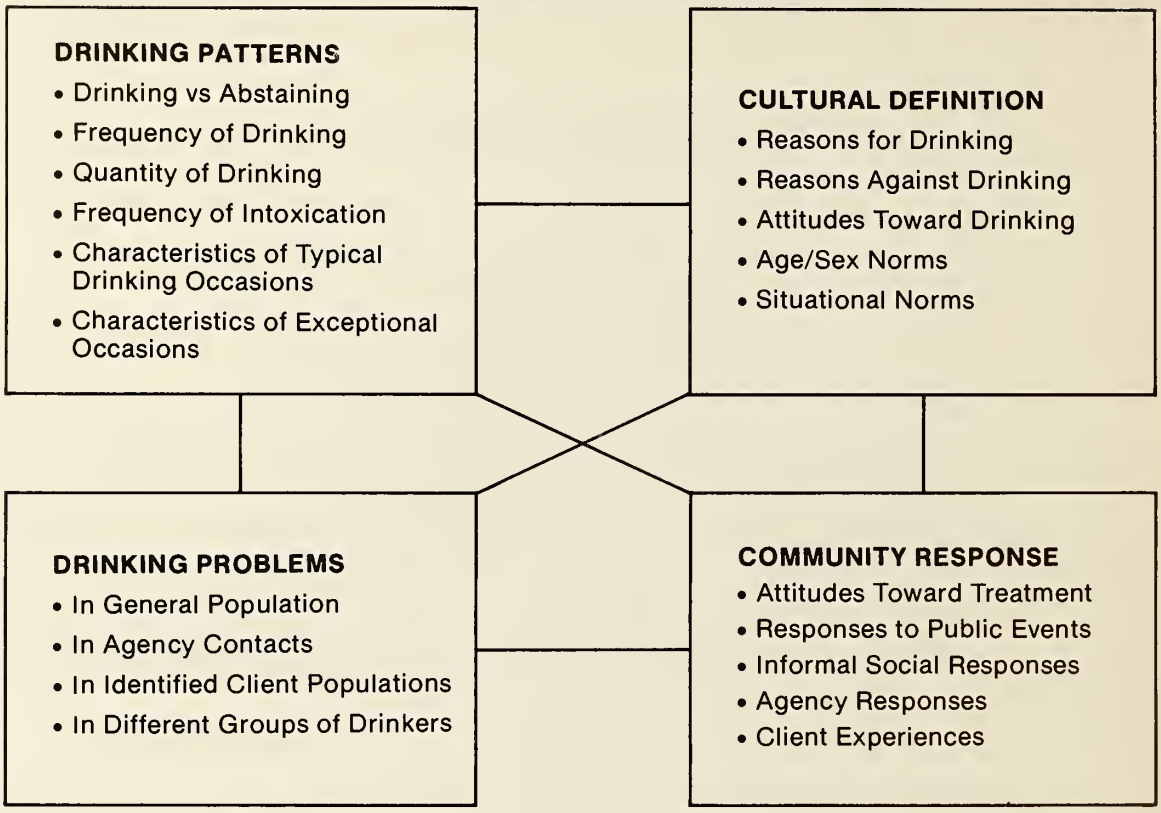
Answers to these questions could give clues as to how drinking problems are managed both formally and informally in the communities studied and perhaps point to possibilities for improvement.

These general and specific questions might be represented diagrammatically as in figure 1, to give the reader an idea of the overall conceptual framework used in the investigations carried out. Each of the general questions constitutes a major domain of inquiry--drinking patterns, cultural definition of drinking, drinking problems, and community response. Within each domain, the specific questions constitute clusters of variables considered.

This conceptual framework was used not only in guiding the design of the investigations, but also in the analysis of the data and in the presentation of the findings.

The next chapter discusses the development of the approaches needed to answer the above questions and generally to fulfill the objectives of the project as described in this chapter.

FIGURE 1
Conceptual Framework for Community Response Project



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CHAPTER 2

DESIGNING THE PROJECT STEPS AND APPROACHES

SELECTING STUDY APPROACHES

It was recognized that, to satisfy the project objectives, it would be necessary to develop multiple approaches to obtain the necessary data. No single approach was likely to yield the range of information required for planning more adequate community responses to alcohol-related problems, because such problems and responses to them have multiple dimensions. A survey of the general population is, for example, likely to yield a picture of the range, nature, and extent of alcohol problems in the community, limited primarily to problems experienced by a so-called "normal" drinking population. People who drink more heavily and people with very serious drinking problems tend to be missed or underrepresented in numbers. To study the latter, it is necessary to search them out in other settings such as community enforcement or treatment institutions or in drinking places. Similarly, in order to assess the community's overall response to alcohol-related problems, it may be necessary to study the institutions that provide these responses and, to place the response in its appropriate context, information may have to be collected from a variety of existing sources, internal and external to the community.

For these reasons, and others mentioned in the section "Conceptual Background of the Project," it was decided that a variety of methods should be developed for this project, each of which was to make a particular contribution to understanding alcohol-related problems in the communities studied and no single one of which would be relied upon to provide definitive answers as to the most appropriate responses to such problems. After considerable discussion in working group meetings, it was agreed that the following approaches to obtaining the necessary information should be pursued during the first phase of the project:

(1) Collation of existing background information
(2) A general population sample survey
(3) A survey of agents/agencies that provide services
(4) Studies of clients of community agencies
(5) Observational and other studies

The methods to be used were designed in detail by collaborators during meetings and were modified on the basis of pre- and pilot-testing. It was unlikely that a common design would be achieved that would fit all circumstances perfectly. Not only would unanticipated events and problems inevitably arise in the field, but there could never be complete consensus in the group regarding the best way to carry out the research. It would be necessary, indeed desirable, to modify the project design to fit the particular circumstances encountered in carrying it out. The collaborators were encouraged to make appropriate changes as they went along and in fact did so. This chapter will describe the common design for each of the five study approaches used in phase I, as well as some common considerations and guidelines with respect to development of community plans. It will also briefly describe the monitoring methods used in phase II. Details on how the work was actually carried out in the different settings are given in part II of this report and in the final country reports (Rootman and Moser 1983, annexes 38-40; Rootman 1983, appendix II).

The collaborators recognized that, in using multiple approaches to data collection with time and resource constraints, it would not be possible to pursue each approach exhaustively. Thus, it was necessary to sacrifice a certain amount of depth in order to try out a broader range of methods, thereby establishing their viability in a variety of different settings. This meant, for instance, that the suggested sizes of samples were not as large as they might have been and in some cases sampling was purposive rather than random.

BACKGROUND INFORMATION STUDY

Objectives

The objectives to be served in the background information study were summarized in the research proposal as: providing the background against which to see how far the community selected is representative of the total country; placing the community problems in a national perspective with regard to the priority and possibility of action; and enabling interested persons from other parts of the world to see the community project in a wider perspective. In addition, it was thought that a number of subsidiary objectives would be served by this study. It was expected to reveal gaps in the available data and deficiencies in the methods of collating information; to establish a basis for national planning, for the study of trends, and for the evaluation of programs; and to initiate and strengthen collaboration between individuals and bodies concerned with alcohol-related problems, thus increasing national and local interest in providing an improved response to the problems under study.

Guidelines

To accomplish these objectives, a set of guidelines was drafted for the collection of general and alcohol-related background information at both national and local levels (Rootman and Moser 1983, annex 1). The general information related to the demographic, sociopolitical, and economic characteristics and to the relevant legislation of the countries in which the communities were located and of the communities themselves. The alcohol-specific information had to do with the availability, control, and consumption of alcoholic beverages and consequences of alcohol use in the countries studied and the specific communities.

GENERAL POPULATION SURVEY

Objectives

The objectives of the general population survey were:

- to furnish data for an examination of the interrelations between drinking-related impairments and disabilities and drinking behavior in the community;
- to contribute to an understanding of the nature and extent of informal processes of community control of drinking behavior and alcohol-related impairments, and the relation of such controls to the formal intervention processes of the community;
- to provide data on the natural history of disabilities in the community, and particularly on the onset and remission of disabilities in the absence of intervention; and
- to yield a rich store of data, collected so far as possibly comparably, for later cross-cultural analysis that might throw light on causes and means of control of alcohol-related problems.

The type of information to be collected in the community and in subgroups would comprise the following:

- drinking patterns, including beverage use, quantity and frequency of drinking, and context of drinking (e.g. place of drinking and with whom);

- attitudes to drinking, including motivations and normative controls in drinking, and perceptions of deviant drinking;
- basic demographic aspects;
- general health issues and life events not connected with drinking.

Questionnaire

With these points in mind, the components of the general population survey were outlined as a basis for drafting a questionnaire. Copies of the draft questionnaire were sent to local investigators and advisers for comment, translation if necessary, testing, and proposals for amendment. Draft specifications for the use of the questionnaire and an administrative guide were also prepared and circulated. These materials were given detailed consideration at a working group meeting, and an amended and expanded pretest version of the questionnaire was prepared.

Pretesting was carried out in the three countries on small samples representing the major dimensions present in the study population. The experience was discussed and the pilot version of the questionnaire drafted. This version, together with a draft formulation of the instructions to interviewers and coders, was used by the collaborators for pilot testing on a representative sample, drawn either from the communities selected for study (in Scotland) or from communities considered comparable to the study communities (in Zambia and Mexico).

This pilot exercise closely approximated the main survey (except in terms of the numbers interviewed). It involved, in some or all cases, translation of the questionnaire; devising of local options for classification; listing of all open-ended responses and a suggested categorization; selection and training of interviewers; selection of respondents; coding and checking of the questionnaire; tallying of responses; and punching and verification of data cards, their listing, and the verification of marginals. The pilot testing experience was reviewed at an advisory group meeting. All the teams considered that the questionnaire was too long, required detail that could not be provided, and required discriminations that were difficult for some respondents to make. This resulted in a number of modifications to the questionnaire and interviewer instructions.

The final questionnaire, together with appropriate interviewer and coding instructions, was mailed to collaborators in April 1978 with the expectation that the survey proper would commence in May 1978. A copy of the questionnaire and interviewer and coding instructions are appended as annexes 2-4 to the international report on phase I (Rootman and Moser 1983) and are available on request from WHO. It should be pointed out, however, that the questionnaires used in the individual countries vary somewhat in both format and content as a result of encouragement to adapt the basic instruments to fit the circumstances, attempting at the same time to preserve as much comparability as possible.

Sampling

General principles of sampling were discussed at working group meetings (Rootman and Moser 1983, annex 5). Because of the differences in the prevailing conditions of the three countries and the communities studied, no fixed rules for sampling were developed. It was simply agreed that collaborators should seek "representative" samples from their study areas. A quota of 1,200 was set for Scotland and 600-700 for the other two countries.

Data Analysis

A number of guidelines pertaining to the analysis of the general population survey data were developed. These included: a plan of data analysis; guidelines for the analysis of General Population Survey data; a description of variables; guidelines for coding and recoding the 7-day drinking experience; and a list of tables to be produced.

Confidentiality and Consent

The following principles governing confidentiality and consent were agreed to: nothing on the questionnaire itself would identify individual respondents; any form of identification would be filed separately from the main questionnaire and access strictly limited to the principal investigators in each country; both the original questionnaire and any form of identification linked to it would be maintained in secure conditions; training of interviewers and their contractual relationship to the project should emphasize the confidentiality of the information obtained; and the identity of the agency carrying out the survey should be available to the respondents.

It might be noted, in this context, that all three countries obtained appropriate ethical clearance to carry out the research and that instructions were given to interviewers on how to obtain informed consent. (Rootman and Moser 1983, annex 3).

AGENTS/AGENCY STUDY

Objectives

The original proposal did not specify the objectives of the survey of agency officials in as much detail as for the General Information Survey but suggested that a sample of officials should be interviewed to provide information on institutional practices, personal attitudes, and behavior toward recognized drinkers.

Exploratory Studies

It was decided to carry out some exploratory studies in the collaborating countries, in particular, to list those agencies/agents providing or potentially providing a service to those with alcohol-related problems in the communities chosen for study; to explore any readily accessible agencies, employing guidelines already available for interviewing a selection of agents and clients; and to consider sampling alternatives for deciding which agencies and agents and persons identified as having alcohol-related problems might be studied. In the case of one community, where a large number of agencies was listed, consideration was given to the selection of smaller communities as foci for the study of agencies.

The collaborators prepared a list of social agents who could or do take action regarding problem drinkers. It had been agreed that the list should be as comprehensive as possible; the listing of the agencies should not be confined to those actually located in the geographic area chosen; some priority would be assigned to the agencies so listed, since their number was likely to be large; and this priority should be determined on the basis of preliminary enquiries among these agencies.

Preliminary Guidelines

Using the information obtained from these enquiries, preliminary guidelines were developed for testing on a limited number of agencies (Rootman and Moser 1983, annex 11). Discussions of experience with such testing led to agreement on a number of points. Given the large number of actual or potential formal and informal agencies that relate to alcohol problems in the areas under study, it was inevitable that some form of selection would need to be exercised in the choice of agency. As broad a coverage of agencies as possible would be sought. The following categories of agencies were suggested: medical, services for both chronic and acute disorders; specialized; police; social; and nonstatutory (religious, political, traditional).

Selection of Agencies

Criteria that were seen as bearing on the selection of particular agencies included the actual and potential significance of an agency in responding to alcohol-related problems, its accessibility to inquiry, the amenability of staff to interview, and their relation to the communities

under study. Other considerations included the physical arrangements within the agency, the rate of flow of clients having alcohol-related problems, the quality of the agency records and the availability of agency staff, duration of client contact, the possibility of follow-up, and the amount already known about the particular agency. It was considered desirable that certain core agencies should be selected and that country teams should be encouraged to investigate additional agencies as they wished and the availability of personnel permitted. Collaborators were then asked to nominate particular agencies within the above categories that fulfilled the criteria outlined and that were realistically included in the light of the personnel available to them.

Interview Forms

An agent/agencies interview form was drafted. It was agreed that pilot studies would be carried out in at least two settings, one of which was an emergency and accident department and the other a police station. A quota of 10 to 20 interviews was set.

Experience in the pilot studies suggested that, when applied to specialized agencies, some of the questions in the agency form were inappropriate. Moreover, it appeared that a more open-ended, "qualitative" schedule was desirable, since the kind of detail required on the pilot version inhibited discussion. It was therefore decided that two forms of a more open-ended schedule should be developed, one relevant to specialized "alcoholism treatment" agencies and the other to nonspecialized agencies. Finalized versions of these forms, notes to collaborators/interviewers, and coding instructions were sent to collaborators in December 1978 (Rootman and Moser 1983, annexes 12-16).

Instructions to Interviewers

The instructions to collaborators/interviewers included conventions for dealing with the following problems: how to choose the particular respondent; what perspective to seek, the respondent's or the agency's; and how the agency should be defined formally, or subjectively by the respondent. It was recognized that there were no definitive solutions to these problems. The conventions adopted consisted of: including agents of different lengths of experience, responsibilities, ages, and sexes as well as, wherever possible, the senior person; asking for the person's own view; and defining the "agency" as that part with which the particular respondent was familiar (Rootman and Moser 1983, annex 13). Quotas for particular agencies were assigned to each of the collaborating teams. In total, the Scottish team was asked to complete 56 interviews; the Mexican, 80; and the Zambian, 60. The distribution by agency is shown in table 1.

TABLE 1.--Quotas for agents/agency study by agency type and country

Category	Scotland	Mexico	Zambia
Emergency and accident	12	30	20
Chronic clinical	6	20	24
Specialized	11	18	0
Police	10	5	6
Social	10	3	4
Religious/nonstatutory	7	4	6
Total	56	80	60

Guidelines for Data Analysis

Guidelines for the analysis of agency interview data were also prepared (Rootman and Moser 1983, annex 17) although, because of the somewhat open-ended nature of the interview, the guidelines could not be as detailed and specific as with respect to the population survey. It was, for instance, suggested that the analysts should pose a number of basic questions to the data deriving from the agents' interview. These questions included: What are the agents' perceptions of the problem? Is there a sensitivity to alcohol problems in the agency? Is there access to and use of other resources? Is there a sense of competence in dealing with alcohol-related problems? and, Are alcohol-related problems actually dealt with by the agency?

CLIENT STUDIES

The history of the development of the client studies was essentially identical with that of the agency/agents study. Exploratory investigations were carried out in the agencies within the communities studied to determine the feasibility and exact nature of the client studies (Rootman and Moser 1983, annex 11). Three instruments were developed: the Case Report Form (police department only), the Case Report Form (with Screening Annex), and the Client Interview Form.

Cases Reported to Police

The first form was to be used to record information on incidents reported to the police whether related to alcohol or not. Copies of this form, instructions to interviewers, and coding instructions were finalized at a working group meeting and sent to collaborators in December 1978 (Rootman and Moser 1983, annexes 18-20). It was agreed that in all study sites, an attempt would be made to obtain 100 completed forms or 1 month's intake if fewer than 100. The following were among the objectives of this particular substudy: to determine the portion of police incidents purported to involve alcohol; to determine the characteristics of persons involved in alcohol-related incidents, compared with those in which alcohol was not reported to be involved; and to determine the nature of alcohol-involved incidents as compared with non-alcohol-involved incidents.

Cases Coming to the Attention of Other Agencies

The Case Report Form (with Screening Annex) was designed to study cases, whether alcohol-involved or not, coming to the attention of other types of agencies. In all three countries, this included emergency and accident agencies and chronic clinical agencies; in Scotland and Zambia, it included social agencies; in Scotland, specialized agencies; and in Mexico, a religious organization. As with the police substudy, it was agreed that an attempt should be made to obtain completed forms on 100 cases or 1 month's intake if fewer than 100. It was suggested that cases should be selected so as to represent shifts, days, including weekends and public holidays, and nights where an agency was open in the evening. In the case of emergency and accident departments, those clients who had already contacted the agency (on their own behalf) 6 months or more previous to their present contact were to be excluded from the sample to permit focus on first attenders. In other agencies, every client, whether seen at the same agency before or not, was considered eligible to be included in the sample. Only cases aged 15 or older were to be included, except where local conventions prescribed an older age at which dependents could speak for themselves.

Copies of the Case Report Form (with Screening Annex), notes for collaborators, instructions to interviewers, and interviewer and coding instructions are contained in annexes 12-24 of the final international report on phase 1 (Rootman and Moser 1983). The main objectives of this particular substudy were similar to those noted for the police study, with the important addition that the Screening Annex was intended to determine the extent to which clients have alcohol-related problems and thereby to select clients suitable for interview using the Client Interview Form. The Screening Annex was to be administered if, in the opinion of the member of the agency staff interviewing the client, alcohol was considered to have been a major or minor cause for their coming to the agency.

Client Interviews

The main objective of the Client Interview Form was to determine the extent and nature of differences between persons identified as having alcohol-related problems through agencies, compared with others not so identified--particularly through the population survey. For this reason, many of the questions on the Client Interview Form were identical to questions asked in the General Population Survey. Another objective of the Client Interview was to determine in what way clients identified by different agencies differ from or resemble each other.

It was decided that, for the purposes of this particular substudy, an attempt would be made in all three countries to interview approximately 20 clients in emergency and accident departments and in agencies for chronic clinical cases and approximately 50 from "specialized"[1] agencies. In addition, in Zambia and Scotland, it was decided to interview about 20 clients from social agencies.

In nonspecialized agencies, clients interviewed using the Client Interview Form were to be selected on the basis of responses to questions on the Screening Annex (Rootman and Moser 1983, annex 23). In specialized agencies, patients fulfilling specified diagnostic criteria were interviewed using the Client Form. Copies of the Client Interview Form, notes to collaborators, notes to interviewers, and interviewer coding instructions are attached as annexes to the final international report on phase 1 (Rootman and Moser 1983, annexes 25-28) and can be obtained on request from WHO.

Subsidiary Studies

In addition to the main Client Studies, a number of subsidiary studies were proposed in order to assess validity and reliability. For example, it was suggested that, as a check on the validity of the Screening Annex as a means of identifying people with alcohol-related problems, the Client Interview Form should be administered to a sample of those not identified by the annex as having such problems and the two groups compared. Similarly, in those cases where Case Report Forms with the Screening Annex were completed by agency staff, it was suggested that a 10 percent sample be reinterviewed by research staff, using key questions to check on the reliability of the answers given agency staff. Such studies are described in annexes 23 and 26 of the final report on phase 1 (Rootman and Moser 1983).

Guidelines for the analysis of data deriving from the client studies are attached as annex 17 to the report (Rootman and Moser 1983).

OBSERVATIONAL AND OTHER STUDIES

Although observational studies were not mentioned in the study proposal, a document on such studies was discussed at a working group meeting (Rootman and Moser 1983, annex 29). This resulted in general agreement on the significance and usefulness of such methods. At another meeting it was agreed that such studies are intended to ensure that the population survey addresses itself to important matters and to lend detail to certain of its findings and those of the agency studies. It was suggested that, where possible, local investigators should engage in those observational studies which helped in the selection of agencies to be followed up and in the formulation of the questionnaire to be employed in the population survey.

Two background documents on observational studies were prepared. The first discussed the nature of observational studies, methodological considerations, and issues and offered practical advice on the training of observers (Rootman and Moser 1983, annex 30). The second briefly reviewed observational studies of objects and spatial relations in alcohol studies (Rootman and Moser 1983, annex 31).

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[1] Scotland was the only country that had agencies specialized in alcohol problems within the areas selected for study. The term included psychiatric hospitals in the other two countries.

Following discussion of these papers, it was agreed that collaborators should identify situations where they felt observational studies might be carried out in their own countries. In exploring which agencies might be suitable for inclusion in the agency study, observational techniques could be employed to derive some of the information required for selecting particular agencies. It was agreed that observational studies of those agencies included in the agency and client studies would be carried out concurrently with the latter inquiries. The researchers were encouraged to act as participant observers in the course of their investigations, taking advantage of any opportunities for observation that presented. Collaborators were also requested to provide descriptive accounts of modal drinking practices and patterns observed in the study communities.

The investigators were encouraged to carry out additional studies where appropriate and to utilize the relevant findings of studies carried out by other investigators in their country.

DEVELOPMENT OF COMMUNITY PLANS

As already emphasized, one of the main purposes of this project was to improve responses to alcohol-related problems in participating communities. It was recognized, however, that achieving this objective would be by no means simple. Not only are alcohol-related problems complex, but translating research into action in this area is fraught with difficulties, including resistance from vested interest groups and the absence of appropriate models, especially for developing countries. For these reasons, the collaborators and advisers held numerous discussions about how best to establish effective and appropriate plans for improving responses to alcohol-related problems in the participating countries. Although these meetings did not lead to a detailed blueprint for action pertaining equally to all of the study areas, they did result in some consensus on planning principles and in the identification of steps in planning, questions to be asked, possible approaches and constraints. Each of these areas will be considered in turn in this section.

Principles of Planning

Agreement was reached that, for the purposes of developing community plans, the concept of community needed to be broadly defined. Appropriate responses could hardly be confined to the particular communities studied in the project. Not only would responses limited exclusively to the local scene be unlikely to be maintained in a hostile environment, but legislation enacted at a national level would be ineffectual unless implemented at the local level. It was therefore agreed that attempts should be made to develop plans not only for the local community studied but for the national level as well. It was also considered desirable for plans to be comprehensive in the sense that they should encompass the total range of alcohol-related problems, including the multiplicity of consequences for drinkers, their families, and the general community. Although each of these consequences may not receive equal priority, they should at least be considered in the context of the overall plan.

It was also emphasized that the plan should reflect the state of development of the country and of the community. There is no point in introducing into a developing area a plan designed for a developed country or community. The plan must be tailored to fit the local circumstances. Such circumstances include cultural values and beliefs as well as the state of services in the community.

Planning was seen as a continuous process in the sense that it is "an unending upward spiral of incremental efforts toward improvement" rather than "a single movement up a rigidly structured static stairway of steps" (Taylor 1975, p. 21). This meant in practice that collaborators were encouraged to carry out planning activities concurrently with the research in anticipation of the data being available. They were expected to involve the local community and influential persons at higher levels in all stages of the project.

It was thought desirable that the plans for dealing with alcohol problems should be integrated with plans to deal with other public health problems, as well as those in other areas of local and national concern. In other words, an effort should be made to look at alcohol-related problems within the total context of problems faced by a particular community or country, since efforts to prevent or reduce alcohol problems may detract from or enhance

efforts to deal with other problems which may be of equal, or perhaps even greater importance.

The above-mentioned principles helped guide collaborators in their task of establishing community plans.

Steps in Planning

Although planning was seen as a continuous process, it was felt that it might be helpful to collaborators if some relatively discrete planning steps were identified (Rootman and Moser 1983, annex 32). The following steps were proposed:

- identification of existing coordinating or other bodies relevant to the formulation of community plans;
- identification or establishment of a coordinating group;
- definition of the objectives and terms of reference of such a group;
- posing of questions relevant to planning to the research data;
- undertaking an interpretative review of the research data in the light of these questions; and
- discussion of the review by the coordinating group and consideration of policy implications.

The attention of the collaborators was also drawn to a paper by Taylor (1975), listing a series of eight systematic stages in the planning process. Another paper, entitled "Overview of a Community Health Planning Process," identifying a similar set of steps, was presented and discussed at one of the working group meetings (Rootman and Moser 1983, annex 33).

Questions Relevant to Formulation of Plans

Questions seen as relevant to the formulation of community plans and which could be posed to the research data were discussed and then listed and distributed to collaborators (Rootman and Moser 1983, annex 34). The following were the main questions:

Magnitude of the Problem

- To what extent does alcohol contribute to a number of defined problems?
- Are there definable subgroups particularly afflicted by alcohol-related problems?
- How are alcohol-related problems geographically distributed in the communities studied? and
- Are there settings and contexts in which drinking is particularly likely to be excessive?

Community Response

- What is the community's repertoire of responses to alcohol-related problems?
- How large a gap is there between the size of the problem and the response made to the problem?
- How adequately do existing agencies discharge their responsibility to people with problems related to alcohol?

- How sensitive are the staff of agencies to alcohol-related problems? and
- What differences are there between the responses made by specialized and nonspecialized agencies to alcohol-related problems?

Relationships Between Data

- Are there associations between particular patterns of drinking and particular problems?
- Are there environmental factors which appear to contribute to prevalence of alcohol-related problems?
- Are there attributes that differentiate between persons with alcohol-related problems who approach specialized agencies and those who do not?
- Are there attributes that differentiate between persons in touch with agencies with respect to their drinking and those not in touch experiencing similar problems?
- How do persons with alcohol-related problems come to the attention of agencies? and
- For how long do alcohol-related problems go unrecognized in communities in the sense of persons not being specifically referred to agencies as having alcohol-related problems?

Attitudes

- What are the motivations and attitudes which appear to sustain drinking and which militate against drinking?
- What are the formal and informal controls affecting drinking in the communities studied?
- Who or what embodies these controls?
- What is the community's attitude toward treatment of alcohol-related problems?
- What do people in the community know about available treatment facilities?
- What are the expectations of people with alcohol-related problems who approach agencies? and
- What kinds of stigma attach to drinking problems in the communities studied?

Approaches to Planning Responses

It was recognized by the collaborators and advisers that a community could respond to the problems associated with alcohol in a variety of ways. In the initial proposal they were classified as: i) educative; ii) restrictive; iii) rehabilitative; iv) therapeutic. It was noted, however, that this categorization does not cover the universe of possibilities and that there are other approaches including development of alternatives to alcohol use, organization of social movements, and separating alcohol use from its consequences (Bruun et al. 1975).

It was felt that, in developing community plans, all of these approaches should at least be considered, although some may be impossible or inappropriate in certain circumstances. The choice of specific intervention techniques (e.g. health education and detoxification) will depend on the problem identified, the goal to be achieved, and the approach chosen.

Constraints on Developing and Implementing Plans

The collaborators were aware of a number of constraints in developing and implementing community plans for dealing with alcohol-related problems. One source of such constraints

is the many functions that alcohol can fulfill in a community and therefore the values that are attached to it. Among other things, it is valued as a food, for ritual and ceremonial purposes, as a facilitator of social intercourse, and for providing relief from tension. In addition, the economic well-being of many people is dependent on the production, distribution, and sale of alcoholic beverages. Thus, any restriction on the consumption of alcohol can be expected to encounter resistance from a number of sources, including the general population. As indicated by the recent WHO Expert Committee on Problems Related to Alcohol Consumption "policies designed to change the population's use of alcohol will need to recognize the forces arrayed against them, forces of widespread acceptance of drinking but also of commercial interest of a massive and influential kind" (WHO 1980).

Another source of constraint is the system already established to deal with alcohol-related problems. In some communities, there is already a broad system of services to intervene with alcohol-related problems. Over the years the services have established accepted ways of coping with the demands placed upon them and they resist any changes which can disrupt these procedures. On the other hand, no services at all may be available and in fact there may be no formal structures for dealing with alcohol or other types of community problems. The latter situation can also be a constraint on the development of plans.

A number of other such constraints, including the complexity of alcohol problems and the lack of people with training and experience in planning, were identified by the collaborators and advisers. The importance of taking cognizance of these constraints in the formulation of plans was stressed.

MONITORING AND MODIFICATION OF RESPONSES

During phase II of the project a protocol was developed to assist collaborators in monitoring attempts to improve responses to alcohol-related problems. The protocol discussed a number of issues involved in monitoring responses including defining the level of intervention, the relationship of monitors to the change process, and the relation of monitoring to the goals of planning and initiating change. It also presented major methods for monitoring including description of programs, documentation of process, collation of indicators, interviews, observations, and record analysis. It noted the need for a monitoring plan and described some considerations involved in the design of monitoring studies. The protocol used by the collaborators is attached to the final international report on phase II (Rootman and Moser 1983, appendix II, annex I) and a revised version is published in the guidelines based on the overall project (Rootman and Moser 1984).

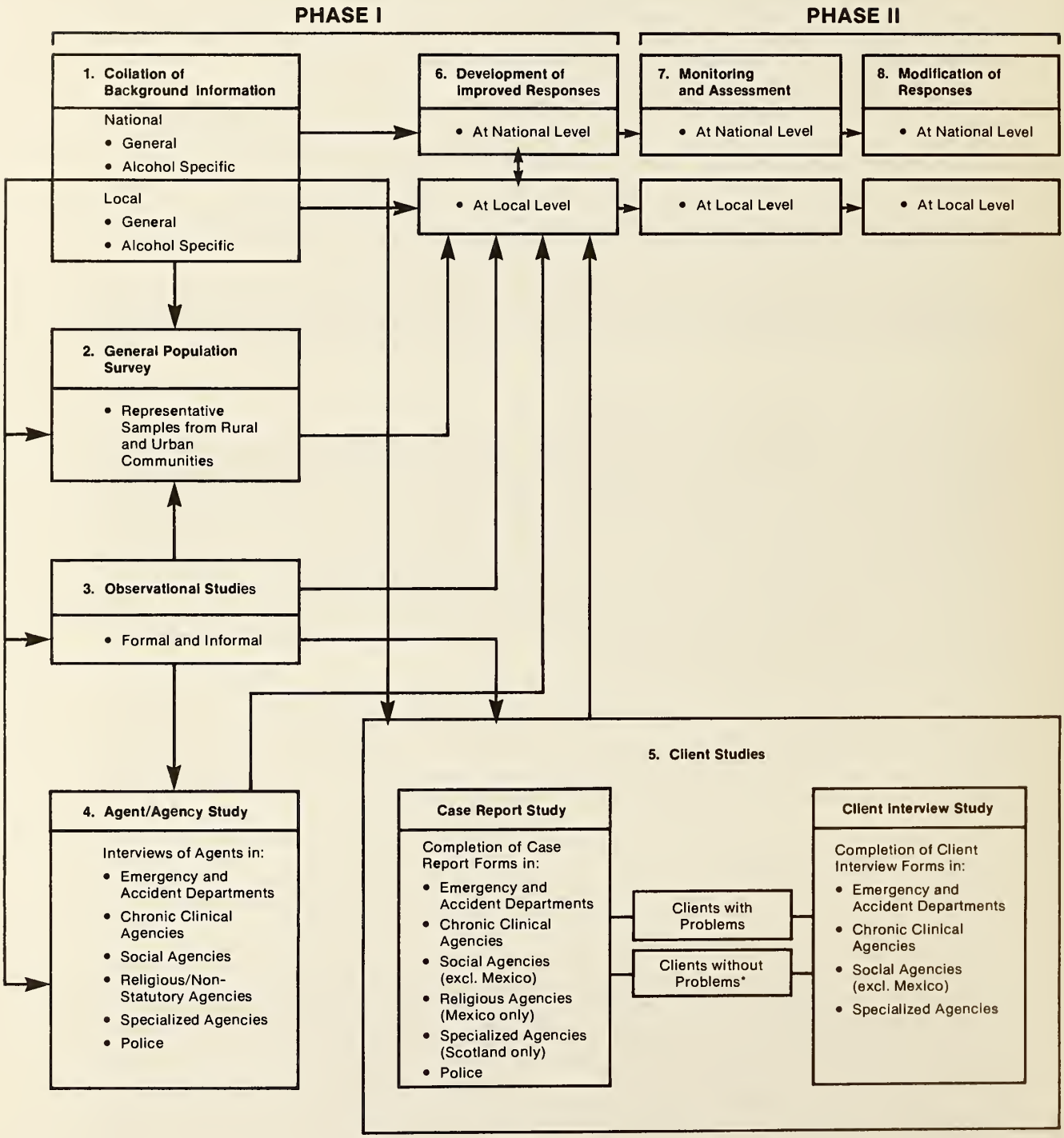
Although no specific guidelines were developed for the purpose, collaborators were fully aware of the need to modify responses based on the results of the monitoring. It was suggested that such modifications would be more likely to be made if there were an explicit mechanism created for the purpose such as a coordinating committee. It was also suggested that the way in which information is presented can be extremely important in determining whether or not appropriate modifications are likely to occur.

OVERVIEW OF PROJECT DESIGN

Figure 2 has been prepared to assist the reader in visualizing the overall design of the project.

As can be seen, the six components of phase 1 of the project are represented in blocks 1-6. The arrows represent the proposed connections among these components. Thus, for instance, it was anticipated that the five study components would provide information that would assist communities in the development of improved responses to alcohol-related problems. The mobilization and involvement of community members was expected also to provide such development. Experience at the community level was expected to be relevant also to the formulation of responses at the national level providing examples of what might be done and raising relevant issues (hence the arrow from local- to national-level responses). Improvement of responses at national level may also affect responses at local levels (hence the arrow going in other direction). It was thought that much of the national background

FIGURE 2
Pictorial Representation of Project Components



information might be fed directly into planning and program development at that level (arrow from national information to response at national level).

It was intended that the study components should be interconnected. Thus, for example, it was considered that the collation of background information would be helpful in the design and execution of all of the other studies and that the observational studies would be useful for the General Population Survey, Agent/Agency Study, and Client Studies.

The most complicated block is number 5, which depicts the Client Studies. It is subdivided into four boxes. The first refers to the Case Report Study, which involved interviews with a quota of 100 cases coming to the attention of a variety of specialized and nonspecialized agencies in the study communities that may or may not involve alcohol problems. In all agencies, with the exception of the police, a Screening Annex was to be administered to determine whether or not cases had alcohol-related problems and thereby to select clients suitable for interview with the Client Interview Form. In nonspecialized agencies, the Screening Annex was to result in the identification of about 20 clients for such an initial interview. In specialized agencies, about 50 patients meeting specified diagnostic criteria were to be interviewed using the Client Form. Finally, a sample of patients without alcohol problems were to be interviewed with the latter form, the Screening Annex, or the Case Report Form to check on the validity of the agency screening.

Blocks 7 and 8 are intended to illustrate the second phase of the project involving monitoring and modification of responses.

PRESENTING THE PROJECT

The collaborators were required to prepare final reports on the project to be used mainly by their own authorities but also by the international community. In order to assist in the preparation of such reports, guidelines were drafted on the basis of discussions at a working group meeting (Rootman and Moser 1983, annex 35). It was stressed, however, that such guidelines were not to be thought of as binding, but simply as suggestions to be considered in writing up the large amount of complex material assembled during the course of the work. This was in fact how the collaborators used these guidelines and their final reports differ in organization and nature. The material presented in the next part of this report, while drawing heavily on the country reports, does not merely reproduce them. Those readers particularly interested in the work carried out in any one of the three participating countries are encouraged to obtain a copy of the individual country reports, since each contains much more detail than is presented here. These reports and where they can be obtained are listed at the end of this monograph.

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PART II

CARRYING OUT THE PROJECT IN THREE COLLABORATING CENTERS

Although, as described in the last chapter, a common design for the project was established collaboratively, it was expected that in practice the collaborators in each of the three countries would have to adapt the methods suggested to their own circumstances, which in fact they did. It was also expected that, because of the unique circumstances in each country and study community, the findings would be unique as well, as in fact they were. Finally, since the structures for planning and policy development were different in each country, it was expected that the collaborators would go about examining the implications of their research and implementing action in different ways, and so they did. Thus, the experiences, findings, and implications of the project in the three countries constitute, to a considerable degree, separate and distinct stories. This part of the monograph is designed to summarize these stories as faithfully and accurately as possible.

To assist the reader, each of the three following chapters uses a common outline. They begin with a discussion of the background of the project in the country; pass on to a presentation of the main findings; consider the implications of the research for action and describe the actions taken; and, finally, present an assessment of the project in the country and an indication of future activities to be undertaken. Chapter 3 concerns the project as carried out in Scotland; chapter 4, Mexico; and chapter 5, Zambia.

CHAPTER 3

EXPERIENCE, FINDINGS, AND IMPLICATIONS OF THE PROJECT IN SCOTLAND[1]

BACKGROUND

Scotland as an Example of a Developed Country Heavily Engaged in Alcohol Production

Scotland is one of the four countries comprising the United Kingdom of Great Britain and Northern Ireland and has a certain autonomy. Health services and social security, for instance, are the concern of the Scottish Home and Health Department and, like education, are funded separately from those services in England. There is also a separate and different legal system.

In several respects the United Kingdom is fairly representative of developed countries, especially of Europe, as can be seen from table 2. It was, however, considered of particular interest to involve Scotland in the project, since it is an example of a country heavily engaged in the production of alcoholic beverages. As in some of the big beer- and wine-producing countries, the advantages in terms of provision of employment and a high contribution to the gross national prduct are to some extent offset by relatively high rates of alcohol problems at home and, in view of the big volume of export, possible contributions to alcohol problems abroad.

Scotland occupies about a third of the total area of the United Kingdom but comprises less than a tenth of the population (the United Kingdom is one of the four countries in Europe with populations of over 50 million). The Highlands of Scotland, which includes many islands, is the least populated area, whereas the Central Lowlands is one of the most densely populated zones of Europe. Scotland has a relatively stable population, little affected by migration. The most common family unit consists of two parents and their two children, and extended families, including grandparents and more remote relatives, are becoming increasingly rare.

Most of the population are of Caucasian origin and their common language is English, but 1.8 percent speak Gaelic. The literacy rate is high, as in other developed areas.

A majority of adult men and women are gainfully employed, services accounting for almost half of all occupations and manufacturing for a third. Unemployment accounted for about 8 percent of the Scottish work force in 1977. However, as in the rest of the United Kingdom, the Scottish population enjoys a variety of social security benefits, including sickness, invalidity, and injury benefits. The advent of North Sea oil has brought a measure of

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[1] The material in this chapter is based largely on the final reports on the two phases of the project prepared by the collaborators in Scotland (Ritson et al. 1981a; Ritson and de Roumanie 1982).

TABLE 2.--Some demographic data for Scotland and the United Kingdom as compared with Europe

	Scotland	United Kingdom	Europe
Area (1,000 km²)	79	244	4,937
Population:			
Total (in millions)	5.2 (1971)	56.4 (1975)	478 (1977)
Urban (percent)	87 (1971)		70[a] (1975)
Aged < 15 years (percent)	25 (mid 70s)		23.9 (1975)
Aged > 65 years, males (percent)	10		12.3[b] (1975)
Aged > 60 years, females (percent)	21		
Annual increase (percent)	.25	.7	.6 (1970-77)
Density (per km²)		231	97
Life expectancy at birth:			
Males	68	69.1 (1975)	68.4
Females	78	75.3 (1975)	74.2
Birth rate (per 100,000 population)	13.1 (1975)	16.1 (1975)	16 (1966-77)
Death rate (per 100,000 population)	12.1	11.7 (1975)	10 (1966-77)
Percent of work force unemployed	8.1 (1977)	5.9 (1977)	
GNP per capita 1976 (U.S. dollars)		4,020	4,420[c]
Medical teams density (per 100,000 population, 1975)		566.6	575.7

Source of statistics for United Kingdom and Europe: WHO 1980.

[a] Northern Europe: 75 percent.
[b] Males and females.
[c] Northern Europe: 4,910.

unaccustomed prosperity to some parts of Scotland but, on the whole, the Scots are less prosperous than the English.

The predominant religion in Scotland is Protestant, but 20 percent of the population is Roman Catholic.

The Scot is commonly taken as a paradigm of unhealthy living, eating too much, notably sugar and fat, smoking more than others, and drinking excessively. It is thought that this lifestyle contributes to a leading incidence of coronary artery diseases and bronchitis. The leading causes of death are heart disease, cerebrovascular disease, malignant neoplasms, and respiratory disease, as is the case for much of the developed world, if accidents are added to the list.

Alcohol Use, Alcohol Problems, and the National Response

Historical

In the 16th century, wine and ale were widely used and abused in Scotland. Whisky probably originated in Ireland, the name coming from the Gaelic for "aqua vitae" (uisgebaugh). It was made in Scotland, from malted barley, by the mid-15th century but became widely known and used only three centuries later, when a system of continuous distillation was introduced and the strong peat smoke flavor could be attenuated by mixing malt and grain whiskies. Gin reached England, via Holland, at the end of the 17th century; 50 years later the annual production had reached 20 million gallons, and heavy taxation was introduced. However, the ravages, so nicely illustrated by Hogarth, were mainly confined to the more rapidly industrializing areas, south of the Scottish border. By the 19th century, though, drunkenness was a major concern in the Scottish cities.

Before the industrial revolution, drunkenness that became unacceptable was dealt with by the chief of the clan. Later, assistance was mainly through the temperance movement, which originated in Scotland. Trotter, in the late 18th century, viewed the treatment of chronic drunkenness as a physician's responsibility, but few followed his interest and inebriates were mainly the concern of the church and the police, although mental hospitals catered to the end stages of alcoholism. Following the Inebriates Act of 1898, a few retreats for alcoholics were established. There was a gradual decline in the incidence of alcohol problems in the early 20th century, but the reversal of this trend after the Second World War led to the setting up of special units for the treatment of alcoholism, including the first in Scotland, opened in 1963 (Ritson and Hassall 1970).

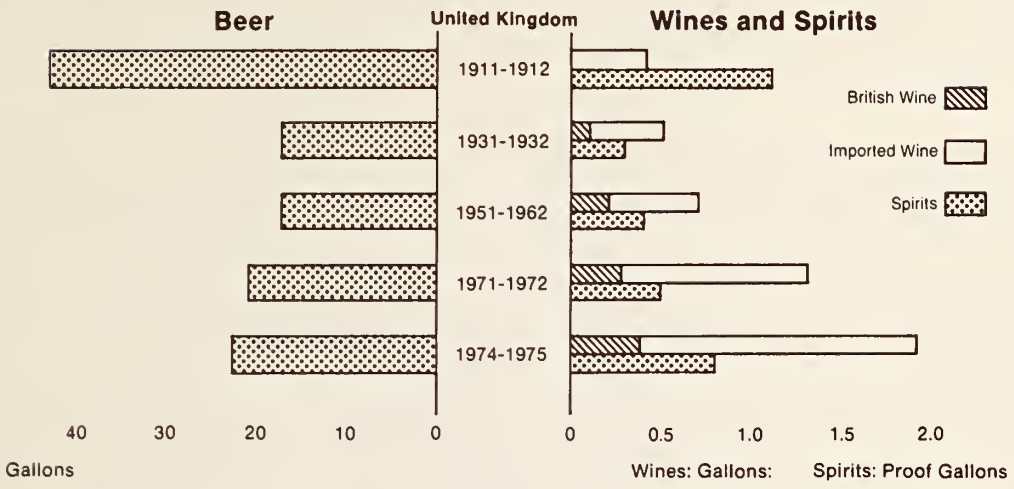
In recent years, the area of concern has widened and now includes a broader range of problems.

Scotland's fame--and Scotland's economy--are now firmly linked with its national drink. In 1978, the country exported 105 million proof gallons of Scotch whisky, which contributed 661 million pounds to the gross national product. The preparation, distribution, and marketing of alcoholic beverages employs 7 percent of the total work force and 17.3 percent of persons engaged in the manufacturing industry (R. Grindal, personal communication, 1979).

Availability of Alcoholic Beverages

Whisky and beer are the main types of alcoholic beverages produced and consumed in Scotland. In 1965, there were 111 whisky distilleries in Scotland (compared with 122 in 1975), there being 4 in England and Wales and 2 in Northern Ireland in the same year. The production of potable spirits (mainly whisky) in Scotland increased by 62 percent between 1964 and 1973 (from 113.7 to 184.4 million proof gallons: SAS [Scottish Abstract of Statistics] 1974) but, as already noted, a high proportion of this was exported. Beer production increased over the same period by 78 percent (2.7 to 4.8 million bulk gallons: SAS 1974). The total quantities of alcoholic beverages retained for consumption (taking account of production, imports, exports, and stocks) are not available separately for Scotland, but figure 3 shows the consumption of alcoholic beverages per capita of the adult population of the

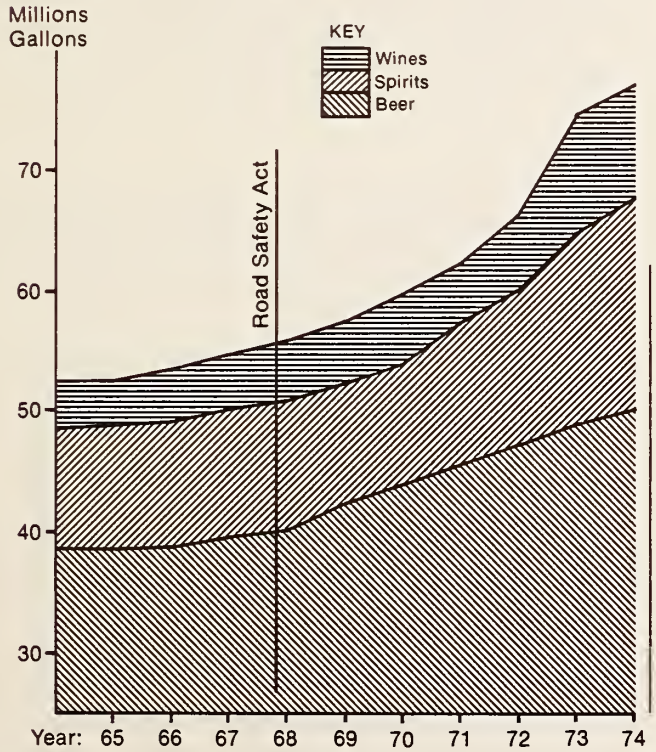
FIGURE 3
Consumption of Beer, Wine and Spirits Per Head of Adult Population, UK, 1911-1975, Selected Years



Source: *HM Customs and Excise, 1976.*

The following figure gives a clearer picture of consumption in the UK between 1964 and 1974 in terms of 100% ethanol.

FIGURE 4
Total Consumption of Alcoholic Beverages as 100% Ethanol, UK, 1964-1974



Source: *U.K. Department of Environment, 1980.*

United Kingdom. (Also see figure 4.) Although the heavy beer and spirits consumption levels of the period before the First World War have not yet been reached, the trend is going in that direction and wine consumption has quadrupled. Over the 10 years 1964-74, the increases in total consumption were 33 percent for beer, 68 percent for spirits, and 152 percent for wine (Grindal 1979). Since the population remained relatively stable during this time, these figures represent massive increases in per capita consumption.

The rising trends in production and consumption are seen in the developed world as a whole. In Europe, the increases in quantities of alcoholic beverages produced from 1960 to 1972 were 9.6 percent for wine, 66.0 percent for beer, and 97.4 percent for spirits (based on statistics in FFAS and WHO 1977). The changes in consumption of alcoholic beverages, as 100 percent ethanol, per person of the total population in 21 European and 2 North American countries between 1950 and 1976, varied from -4 percent (France) to +592 percent (German Democratic Republic) with an annual average in 1970-1976 ranging from -1 percent (Austria and Italy) to 10 percent (Italy, Poland). The United Kingdom was one of five countries showing an annual increase of +5 percent (Moser 1980).

The per capita consumption of alcoholic beverages, in terms of 100 percent alcohol, for the total United Kingdom population in 1976, was 8.4 liters compared with 12.7-16.5 liters for the major wine drinking countries (France, Portugal, Spain, and Italy), but the trend toward increase in the United Kingdom between 1950 and 1976 was higher than for the latter countries (+71 percent, compared with -4 percent for France and +29 percent to +65 percent for the others). On the whole, though, changes in the United Kingdom are tending to follow a more general movement to "homogenization." In other words, the consumption of the beverages formerly less commonly used--in this case wine--is increasing more rapidly than that of the others, but not replacing them.

It is difficult to estimate how far the data and trends for the United Kingdom apply to Scotland. Surveys indicate that increases in expenditure on alcohol as a percentage of total weekly household expenditure have been fairly similar in the two areas, reaching 5.8 percent in 1974-75 in Scotland (Family Expenditure Survey 1975) and 5.1 percent in 1975-76 in England (United Kingdom Central Statistical Office 1977), where, however, incomes were higher. On the other hand, a review of problems related to alcohol consumption suggests higher alcohol intake in Scotland than in England or in the United Kingdom as a whole (although the evidence for this is far from conclusive).

Patterns and Consequences of Alcohol Consumption

Until recent years there was little factual information about Scottish drinking habits. This situation was greatly improved by a 1972 survey (Dight 1976), which covered a national sample of Scots aged 17 years and over. Dight found that approximately 90 percent of the sample of 2,453 drank and that men drank a lot more than women. Three percent of male drinkers were responsible for drinking 30 percent of all the alcohol consumed in a typical week. This group drank the equivalent of at least 51 single whiskies (or 25½ pints of beer[2] a week). While these "heavier drinkers" represented 7 percent of all male drinkers, they constituted as many as 15 percent of young male manual workers aged 17-30 years.

Three-quarters of the men and approximately one-half of the women drank at least once a week. Regular drinking proved much more common among women married to nonmanual rather than manual workers. This occupational gradient was not evident among men. The sexes also differed in their preferred tipple and in their choice of drinking locale. Beer was the most popular drink for men, whereas women would choose spirits and other "short" drinks. Most male drinking took place in pubs, commonly in all-male company. Women were more likely to drink in mixed company, in their own homes, or those of relatives or friends. The male heavier drinkers, almost without exception, drank in pubs.

There have been a few smaller, more recent population studies that largely support Dight's findings. A community survey (Saunders and Kershaw 1978) involving 10 percent of the

[2]One small whisky usually contains about 9 grams 100 percent ethanol, as does half a pint of beer.

population of a town of 40,000 inhabitants (Clydebank) showed marked differences between the sexes in drinking behavior. Males were twice as likely to be regular drinkers, whereas females reported an abstinence rate three times that of their male counterparts. Regular drinking occurred primarily among young adult males and became less common after the age of 35. The average week's intake for a young male was about one bottle of whisky or 12-13 pints of beer. The main difference from the findings in the national study was that females on average reported a 25 percent higher consumption.

Considerable variation has been noted in self-reported alcohol consumption between different towns in Scotland (Plant and Pirie 1979). Per capita consumption proved significantly higher in Glasgow and Inverness than in Ayr and Aberdeen. Young male manual workers constituted the majority of heavy drinkers.

The national survey (Dight 1976) did not specifically inquire about alcohol-related harm. However, the Clydebank study (Saunders and Kershaw 1978) found that, among respondents aged over 15 years, 5 percent of males and 1.1 percent of females could be classed as "problem drinkers", and 5.1 percent and 0.5 percent, respectively, as "alcoholics." In comparison with data from a study in Manchester, England, using the same criteria (Wilkins 1974), "problem drinking" in Clydebank appeared to be about seven times more frequent.

A careful review of problem drinkers identified among the patients of general practitioners in Shetland revealed the surprisingly high number of 78 per 1,000 males (aged 17 years and over) and 12 per 1,000 females (Blaxter 1979). The evidence at present suggests that the prevalence of alcohol-related problems of various kinds increases as we move North through Britain and that this gradient is largely maintained within Scotland itself.

Statistics referring to specially identified populations tend to confirm that Scotland's concern about its "drink problem" is justified. MacRae et al (1972) noted that "whereas alcoholism was one of the three major causes of admissions to a typical Scottish mental hospital in 1906, by 1956 it had sunk to a position of relatively minor importance as a cause of admissions (to mental hospitals)." This decline has since been abruptly reversed, the number of admissions doubling between 1956 and 1961. By 1969 patients with a diagnosis of alcoholism and alcoholic psychosis accounted for 58.3 per 1,000 admissions and, in 1976, for 103.51 per 1,000. In contrast, the rate in England and Wales, while it had undoubtedly been rising, was only 26.82 per 1,000 (Davies and Walsh 1979). Even higher rates are found in some other European countries (Moser 1980, table 6). The variations between and within countries may, of course, be related partly to differences in hospital admission policies (Orford and Edwards 1977).

Among acute male admissions to a general medical ward in Glasgow, 25 percent were found to have an alcohol problem and in 19 percent of cases the admission was either directly or indirectly due to alcohol (Quinn and Johnston 1976). A similar study among female admissions showed that alcohol was an important contributing factor in 15.8 percent of patients, and in 8 percent, the husband's drinking had contributed to their admission (Lennox and Tait 1979).

In Glasgow, alcohol levels in excess of 1 g per 1,000 g blood were observed in 42 percent of head injury cases (Galbraith et al. 1976). Several Scottish studies of self-poisoning found that as many as 45 percent of males and 12 percent of females had drinking problems (Patel et al 1972). In 1974, an association between drinking and fire fatalities was reported in 54 percent of incidents (SCA [Scottish Council on Alcoholism] 1974).

Reports of this kind make it clear that alcohol problems are costly to the National Health Service. It has proved more difficult to establish comparable data for social work services. Estimates of alcohol problems in social workers' caseloads in Strathclyde varied between one-third and three-quarters of all cases (Collings 1979). In industry, the SCA, an autonomous voluntary organization at the national level, estimated that the alcoholic employee costs the company £600 per annum and the cost to Scottish industry is estimated to be in the region of £35-50 million (SCA 1979).

The Road Traffic Act of 1967 stipulated a level of 0.8 g ethanol to 1,000 g blood, above which an individual would be prosecuted for driving under the influence of alcohol. When the regulation was first introducted there was an appreciable decline in road accidents and

injuries. There is evidence that these inital benefits have been virtually eradicated and there is a current debate around the issue of more rigorous control of drinking and driving. The number of convictions for drunk driving in Scotland in 1978 was 14,704, which represents an increase of 30 percent over the previous year and an increase of over 100 percent in the past decade. The number of prosecutions per 100,000 vehicles licensed in Scotland is almost double the average for the United Kingdom. In the United Kingdom in 1974, 35 percent of drivers who died in road accidents had levels of over 0.8 g ethanol per 1,000 g blood (United Kingdom Department of the Environment 1976). This compares with the figures produced by the OECD (OECD 1978), showing that 30 to 50 percent of fatal road accidents in the (developed) OECD countries were associated with alcohol levels above legal limits (or occasionally other drugs) in the blood of drivers.

Convictions for drunkenness in Scotland increased annually during the past decade up to 1975, leveling off in 1976 to a rate of 36 per 10,000, and falling in 1977 to 26. It is interesting that this decrease coincided with a change in Scotland's licensing laws, but the decline seems to have been relatively short-lived.

Between 1968 and 1978 there has been a 27 percent increase in drunk and incapable cases known to the police and a 67 percent rise in petty assaults and breach of the peace charges, the majority of which are known to be alcohol related.

Death rates from alcohol-related causes also provide indications of problem levels. Surprisingly low mortality from cirrhosis of the liver is found, however, for England and Wales which, apart from Iceland, had the lowest rate in Europe in 1974 (3.6 per 100,000 population); however, the Scottish rate was nearly double (6.5). Within the United Kingdom, as within other developed countries with relatively reliable statistics, changes in these rates tend to keep pace with changes in rates of alcohol consumption. Kilich and Plant (1980) computed mortality from 5 alcohol-related causes (alcoholic psychosis, alcoholism, liver cirrhosis, accidental poisoning by alcohol, suicide, and self-inflicted injury) and found an overall level in Scotland of 14.7 per 100,000 inhabitants (twice that for England), with regional rates ranging from 6.7 in the Western Isles to much higher figures in the North, reaching 34.3 in Shetland.

In a recent review of alcohol-related problems in Britain, Kilich and Plant (1980) devised an "alcohol problem" score derived from the incidence of alcohol-related mortality, crime, and morbidity in each part of the country. The lowest each region could "score" was 3, and the highest, 12. The national distribution of these scores suggested that alcohol-related problems were much more common in the north. Lothian has a relatively low incidence, compared with some parts of Scotland.

Data of this kind should be interpreted with great caution, however, as diagnostic practices vary around the country, drunkenness is regarded with differing degrees of seriousness by the courts and police, and the services available for alcoholics are unevenly distributed. Such problems are well known and were recently reviewed by Kreitman (1979). Even allowing for this it seems reasonable to conclude that, while Scotland's problems with alcohol may seem modest compared with some other European countries, there is reasonable ground for concern, particularly in terms of the social harm caused by drinking, the rapid growth in consumption, and attendant problems in the population.

National Responses to Alcohol-Related Problems

Administrative responsibility. In 1976, a report on community services for alcoholics in Scotland made it clear that alcoholism was not simply a medical concern. It recognized the diverse manifestations of alcohol problems and the responsibility of voluntary agencies and social work departments to work alongside health boards in planning and developing a range of services for those with alcohol problems and their families. This report did not bring any promise of increased funding and indeed stressed the scarcity of new resources at that time (Social Work Services Group 1976). The most useful product of this report was the stimulus it provided to liaison between different divisions of health and social planning. One practical consequence has been that joint liaison committees on alcohol problems have been set up in most regions in Scotland.

This development has been strongly promoted by the Scottish Council on Alcoholism (SCA), which was founded in 1973. Its four main purposes are: to take a comprehensive view of alcoholism problems and to advise government; to promote and coordinate services and facilities, education, training, and research for the prevention, diagnosis, and treatment of alcoholism and its related social and industrial effects; to establish and sustain a national network of affiliated local councils on alcoholism; and to raise funds at national levels for its affiliates.

The SCA's aims are endorsed and supported by central government, statutory authorities, and leaders in the professional fields. The council works with other voluntary organizations concerned with alcoholism and maintains close contact with local government and health authorities and a broad cross-section of interests in the community.

As a result of local endeavors and SCA encouragement, there are now 15 Councils on Alcoholism in Scotland. There is also a national training scheme for local counselors. The SCA has organized annual schools in alcoholism for professional workers and voluntary counselors. It has played a prominent part in promoting alcohol counseling in employment (SCA 1978), but, despite a raised level of interest by employers and unions, the actual response in practical terms has been disappointing compared with the growth of such employment-based alcoholism programs in other countries.

The Scientific and Professional Advisory Committee for the SCA involves individuals from many spheres who have a special concern for alcohol problems. It reports through the council's executive committee direct to the Secretary of State. Recent reports have concerned health education and prevention (SCA 1978) and the development of services (SCA 1979).

Services for treatment and care. Alcoholism is regarded as an illness in Scotland, and any patient suffering from it may be treated free of charge within the National Health Service. All individuals can register with the general practitioner (GP) of their choice, who provides them with primary medical care. This should involve the recognition and, if feasible, treatment of alcohol-related problems. The current emphasis on primary care in treatment places the GP in a key position to recognize and deal with alcohol problems. In many areas the GP works within a team of nurses; health visitors; and, sometimes, social workers. A report on the recognition of problem drinking in general practice was published recently (Scottish Home and Health Department 1980).

At present many practitioners choose to refer recognized alcoholics for a specialist's advice and treatment, most of which is provided (again free of charge) by general psychiatrists. In some parts of Scotland as many as one-third of all male admissions to general psychiatric wards are alcoholics.

As mentioned, in 1962 the Ministry of Health in England and Wales issued a memorandum to hospital authorities recommending that special units for the treatment of alcoholism should be set up in each health district. There are now five such units in Scotland, the first having opened in 1963 in Edinburgh (Ritson and Hassall 1970). These units concentrated at first on the provision of assessment and inpatient treatment, usually employing group techniques and adopting abstinence as the preferred goal. In response to a number of studies (Ritson 1968; McCance and McCance 1969; and more recently Orford and Edwards 1977), there have been growing doubts about the need for and efficacy of intensive inpatient treatment. It was also clear that small specialist units could never respond adequately to such a diverse and common problem as alcoholism. They are even less well equipped to "treat" alcohol-related problems as these are construed. As a consequence of such trends, units for the treatment of alcoholism are now much more heavily invested in outpatient treatment, view themselves as services for specialist training and research, and are actively involved in developing community programs in which their staff play a supportive, consultative role.

Social work forms the other division of health and welfare services in Scotland. It is organized and administered on a regional basis and, since 1968, has offered a general service on the principle that the social worker should be able to respond to a wide range of social, personal, and welfare problems. There has been a move away from specialization within social work, although there is some evidence that this trend is now being reversed. Social

work departments are required not merely to react to known needs but to aid the promotion of good social conditions.

During the past decade social work departments have been increasingly concerned by the plight of the homeless. It was known that a number of homeless men and women also had alcohol problems. The Scottish Council for the Single Homeless has proved very active in highlighting the housing needs of homeless people, most of whom are living in overcrowded lodging houses. This voluntary organization has found much common cause with FARE (Federation of Alcoholic Rehabilitation Establishments), another pressure group concerned with the rehabilitation of socially disadvantaged alcoholics who require protracted social support during their recovery.

These and other groups have expressed repeated concern about decriminalizing the drunkenness offense, and have been leading advocates for the establishment of detoxification centers complete with a range of aftercare facilities. Hamilton et al. (1978) have shown that habitual drunken offenders could, with relative ease, be deflected from the penal system and detoxicated in the hospital. The most recent Criminal Justice Bill (1980) has recommended decriminalizing simple drunkenness, but alternative provisions have not been forthcoming. The only detoxification facility for drunken offenders in Scotland is in Greenock and is organized by the Salvation Army. Strathclyde, Lothian, and Grampian have, however, laid plans for detoxification centers that are waiting financial support. The model outlined in the report of the Committee on Alcohol Related Problems, appended to the Scottish Final Report on Phase 1 (Ritson et al. 1981a), provides one typical example of the kind of facility being planned.

A variety of organizations based on church and special interest groups provide care in areas where statutory provision is limited or seems unsatisfactory. In recent years, there has been an increase in pressure groups representing the needs of socially disadvantaged sections of the community, such as the mentally ill, battered wives, or the elderly. These groups have brought a new political edge and effectiveness to many voluntary organizations that had their origins in philanthropy and charity.

The Church of Scotland, through its Committee on Social Responsibility, has expressed recurrent concern about alcohol problems in Scotland and has established a number of day centers and hostels for socially deteriorated alcoholics. The Salvation Army has a longstanding concern for social derelicts and has developed an interest in services for alcoholics and detoxification centers in recent years. The Talbot Association, which is predominantly Roman Catholic in origin, has created day centers and hostels for alcoholics, particularly in the West of Scotland.

Alcoholics Anonymous and Al-Anon have, of course, a prominent role in helping individual alcoholics through groups throughout Scotland. In an individual capacity their members have played an important part in many planning developments.

It would be tedious to list all the voluntary organizations that have some concern for alcoholics. In 1978 a register of voluntary and statutory services to alcoholics in Scotland was drawn up. It contained 60 separate specialist, and almost twice as many nonspecialist, services which had some concern for individuals with alcohol problems.

Preventive efforts. In view of the important role played by alcohol production in the country's economy, it is not surprising that there has been only limited consideration at governmental level of any need to control the quantities of alcoholic beverages produced and available in the interest of health.

Drinking habits may be influenced by the State altering the permitted hours of opening or by taxation. The licensing laws are enacted separately in Scotland from England and Wales. The Clayson Report (Scottish Home and Health Department 1974) provided an excellent summary of licensing policy and attitudes toward alcohol misuse in Scotland and suggested a modest relaxation of the existing controls on opening hours. The aim of the proposal was to take away some of the pressure to drink quickly and to encourage pubs to become places where families might be together by encouraging special licenses permitting children to be with their parents in certain drinking places. This suggestion was not adopted, but a modest extension of permitted hours was introduced. The common hours of opening are

now 11 a.m. to 2 p.m. and 5 p.m. to 11 p.m. (on Sunday the hours are somewhat shorter). One unanticipated consequence has been all-day opening in certain city pubs where licenses have applied for special extensions on a regular basis. This has changed parts of Scotland from being places with very limited hours to becoming the most liberal parts of the United Kingdom as far as opening times are concerned.

Taxation of alcoholic beverages is a well-established governmental practice in Britain which, although not intentionally directed toward health, presumably limits amounts of alcohol consumed. The influence of cost of alcohol on consumption was demonstrated in Scotland by Semple and Yarrow (1974), who showed alcohol consumption and admission to mental hospitals with a diagnosis of alcoholism both rising steeply at a time when the price of whisky, in terms of available disposable income, was falling steadily. Kendell (1979) reviewed these and similar trends and called upon professional bodies and government to recognize the political dimension of alcohol-related problems. The Advisory Committee on Alcoholism (Department of Health and Social Services, 1978) recommended that alcohol should not be allowed to become cheaper in real terms and that when income levels rise so should alcohol taxation.

While the public health aspects of smoking are generally known in Scotland, it is doubtful whether a similar level of public awareness exists about alcohol. Acts that interfere with availability or cost of alcohol tend to be viewed as unwarranted government interference and are rarely seen as health issues. It seems probable that education of the public will be required before such measures are seen as health concerns.

Much of Scotland's ill health arises from the prevailing lifestyle and, in recent years, health authorities have come to view education about healthy living as a priority, although inevitably most funds continue to be invested in services.

The Scottish Health Education Group has invested in alcohol education. At first its campaign used the media, principally television and the press, to alert problem drinkers to seek help. This seems to have been quite successful and provoked an increased attendance rate at a number of facilities. More recently, the focus has shifted to a younger audience in an attempt to foster sensible drinking. The campaign now shows the socially embarrassing and dangerous consequences of excessive drinking.

The Scottish Health Education Group, SCA, and the Alcohol Education Center (London) have joined forces in organizing a number of schools and courses aimed at improving levels of knowledge and skill among various professional groups. The Medical Council on Alcoholism has created regional advisers in Scotland to promote medical postgraduate and undergraduate education about alcohol. Paisley College of Technology has a department that provides training in alcoholism for professionals (Center for Alcohol Studies). The aim in all these endeavors has been to improve the competence of front-line workers to a level where they feel confident in responding to alcohol problems detected among their clients or patients.

There is growing interest in health education in schools and it is currently proposed that alcohol education should be integrated within the school curriculum in junior and senior school. The principal responsibility would lie with guidance staff within schools, but each head teacher has considerable autonomy over subjects introduced. Each health district has now established departments of health education, which in many cases are cooperating with interested schools in providing information and discussion about drinking.

Research. During the past 15 years there has been a steady growth in research interest concerning alcohol-related problems in Scotland. The Chief Scientist's office has recognized that "alcoholism is a major health problem in Scotland" and has outlined a number of priorities for future research into alcohol problems (Ashley-Miller 1976). The universities have promoted research into various aspects of alcohol problems, some social, others medical or biochemical. The growth of interest in many facets of alcohol research has been fostered by the Alcohol Research Group at Edinburgh University and the various medical and social research council units in Scotland, notably at Aberdeen and Edinburgh. A measure of this interest is the twice-yearly research symposium held in Pitlochry, which is attended on a regular basis by at least 20 workers from different parts of the country and at which there is always a very full program on new research in progress. The current project has been fed into this symposium on a number of occasions and the project team hopes that the cross-fertilization of ideas between various research interests will continue.

Community Selected for Study: Lothian

Geography and Demography

The area selected for general study in Scotland was Lothian, which is one of the country's 12 administrative regions. It lies at the eastern end of the Central Lowland belt with the North Sea as its eastern boundary, the Firth of Forth to the north, and hills rising to 1,500 feet in the south. Scotland's capital city, Edinburgh, covers 15 percent of Lothian's land area of 1,770 km^2 but includes nearly 64 percent of its population of 738,000 (1974). With 435 persons per km^2, it is one of the most densely populated regions of Europe, comparable with 500 persons per km^2 in London and in the Ruhr industrial area. Between 1961 and 1971, the population of the region increased by 0.4 percent a year, compared with 0.25 percent for Scotland, the growth arising from a natural increase plus local gain of population from the rest of Scotland, modified by a migratory loss. In 1974, however, the region had a net migratory gain of about 1,000 persons. In 1971, 93 percent of the population was urban, compared with 87 percent for Scotland as a whole (Scotland, General Register Office, 1971). According to the 1971 census, 47.5 percent of the population of Lothian was male.

Employment

The labor force of Lothian represents about 47 percent of the population, of which about 65 percent are employed in the service sector (compared with 55 percent in the United Kingdom). The manufacturing industries (motorcars, electronics, precision engineering, printing) have greatly expanded during the postwar period and now employ 20 percent of the labor force. Another 8 percent are employed in construction and 2.4 percent in mining (the largest concentration in Scotland). Agriculture, although occupying only 1.1 percent of the work force, is of continuing importance because of the good farm land producing barley and vegetables, which supply food processing industries in and around Edinburgh. Between 1964 and 1975 there was an increase in female employment, especially in Edinburgh, where almost half of the available jobs are now for women. Unemployment accounted for 6.8 percent of the workforce in Lothian in 1977.

Social Aspects

Nearly three-quarters of the jobs in Lothian are provided by Edinburgh, which is a center of Scottish law, church, government, banking, insurance, medicine, and cultural life. There are 25,000 students in the several colleges and two universities, and the city's reputation as a center for research and conferences is growing. Edinburgh's importance as a tourist, sports, and festival center is second only to London in the United Kingdom. The city, district, towns and rural areas of Lothian are socially and economically interdependent regarding housing, community, utility, and transportation services. Edinburgh, however, serves an area broader than Lothian, covering parts of 3 neighboring regions.

Health and other services are similar to those available in other parts of the country. In Lothian there are 416 qualified general medical practitioners (1 to nearly 1,800 population), 5 general and 4 psychiatric hospitals, and 16 social work teams.

As in the other administrative regions, Lothian has an elected council with wide responsibilities, including the provision of social work, education, recreation, and law enforcement. They receive a grant toward such services from central government and are asked to levy rates from property owners in the region. Within Lothian there are three districts with elected councilors. Districts have responsibility for some aspects of their community, notably the provision of housing.

Alcohol Use, Alcohol Problems, and Response in the Community

Drinking Patterns and Problems

Before the community response project was undertaken, there were no general data on alcohol availability and patterns of use specifically for Lothian.

Plant (1978), however, studied selection factors influencing the drinking habits of persons entering the drink trade. Interviews concerning the drinking habits of a sample of new male recruits in the drink trade in Edinburgh compared with a sample recruited to occupations not noted for a high incidence of alcoholism showed that the former drank on an average the equivalent of 264 g 100 percent ethanol a week compared with 168 g for the latter group. Lothian does not, though, have the heavy density of employment in the drink trade seen in some parts of Scotland. In one small town in the north, for example, nearly 25 percent of employment is within the drink trade (Cunningham, personal communication, 1980).

Regarding other alcohol problems, it is notable that whereas for the twelve regions of Scotland the mortality from liver cirrhosis ranges from 1.8 to 8.1 per 100,000 population, the relevant rate for Lothian is 5.8. For total alcohol-related mortality, the range of rates is 6.7-34.3, with a rate of 12.8 per 100,000 for Lothian (Kilich and Plant 1981).

Structure for Community Response

An important reason for choosing Lothian as a community for study was the current interest in developing a joint community response to alcohol-related problems in this area. The Lothian Area Health Board, the Social Work Department, and the combined voluntary agencies in the area had all committed themselves to a joint planning venture which took place throughout the duration of the project. There was therefore an ideal opportunity for a continuing dialogue between this research and the laying of future plans.

During the past 15 years there have been four main pressure groups concerned with alcohol problems in the area. These comprise the Health Service, frequently represented by the staff of the Unit for the Treatment of Alcoholism, Edinburgh; the Edinburgh and District Council on Alcoholism (EDCA); Alcoholics Anonymous; and the Social Work Department--most notably through their concern for the Grassmarket area in the city, where most social derelicts congregate. More recently additional interest was stimulated by a Medical Research Council unit directing its epidemiological research concern toward alcohol problems.

Workers with a special interest in alcohol problems were conscious of the need to plan services together, look at existing resources, and identify gaps in provisions. With these aims in mind, a Group for Liaison on Alcoholism Services was formed in 1976, of which the principal investigator of the Community Response project was the first chairman. This group comprised many diverse interests (social work, health, the Church of Scotland, and various voluntary bodies). It met to compare views and to become more aware of each other's activities and it continues to meet regularly.

Around the same time the Lothian Health Board established a program planning committee on mental health to advise the board on services for the future. This committee created a subgroup on alcohol problems that reviewed existing services in Lothian and recommended plans which, in essence, called for a greater involvement of front-line health and social work agencies in the provision of services to problem drinkers.

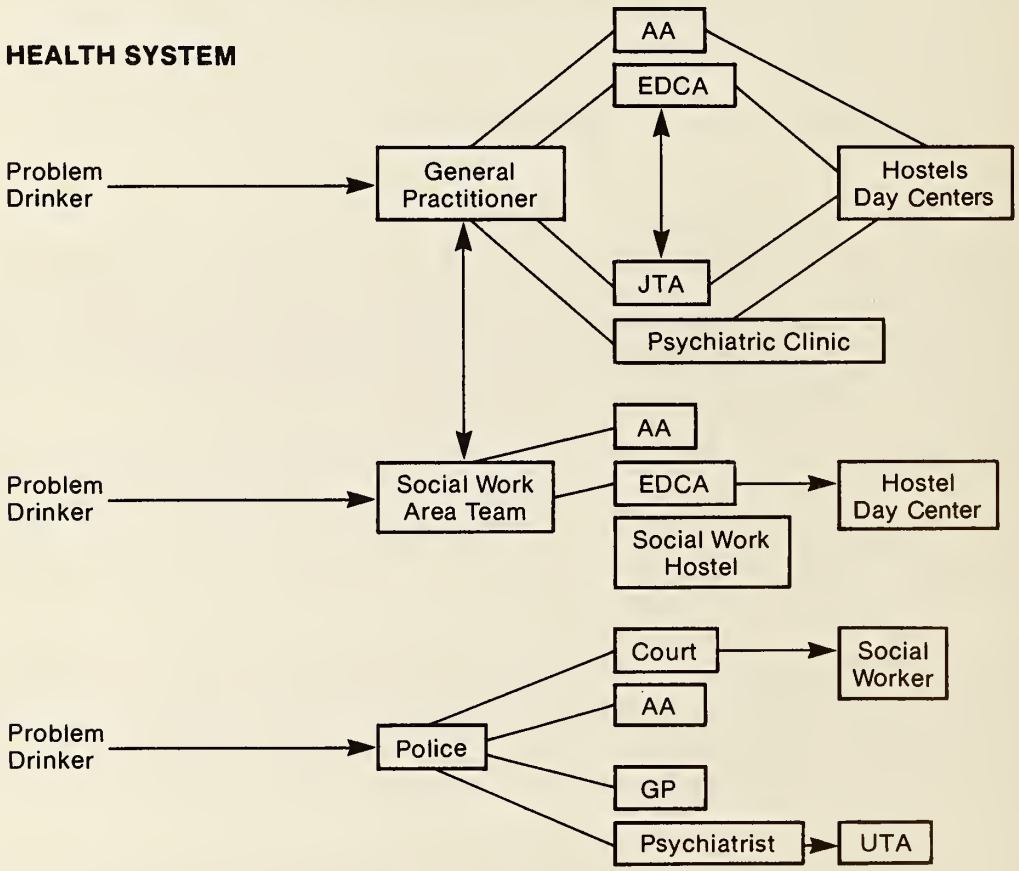
By this time the need for joint planning was becoming more generally recognized. Using the structure of the Social Work Service Group circular on community services (1976) already referred to, the Social Work Committee, the Health Board, and interested voluntary agencies combined to formulate a joint proposal for a community response to alcohol problems. Two members of the project research team were on this committee and were able to feed the developing research ideas of the project directly into the community plan as it developed.

Services for Treatment and Care

The following examples (figure 5) show some of the most common routes of entry and referral patterns for the problem drinkers which existed at the start of the project in the Lothian region.

This diagram is principally concerned with entry; almost all of the relationships are two-way and allow for return of clients to the primary-level agencies. Direct access of clients to the Unit for the Treatment of Alcoholism occurred occasionally, direct access to Alcoholics Anonymous and EDCA were common. Families most often made contact directly with Al-Anon or EDCA.

FIGURE 5
Common Referral Patterns



UTA — Unit for the Treatment of Alcoholism
EDCA — Edinburgh and District Council on Alcoholism

Source: *Ritson, et.al., 1981a.*

Education

In common with other parts of the country, workers were concerned about preventing alcohol problems. The Unit for the Treatment of Alcoholism has some responsibility for training professionals in the region. EDCA, in cooperation with the extramural department of the University, organizes courses in alcoholism for interested individuals and has a training

course for voluntary counselors. The Health Board has identified alcohol education as a priority concern among the Health Education Officers, and one of them has a special interest in this task. As noted in the report to the program planning committee, health education was seen as a priority for future joint planning. Alcohol education in schools was progressing in a piecemeal way, usually under the auspices of the guidance department. Voluntary and church organizations provided a frequent resource for schools and some schools made use of the Scottish Health Education Group film about adolescent drinking.

Other Preventive Strategies

Regions may appear to have little opportunity for other preventive strategies. However, they do have control over allocating licenses and extending permitted hours and can therefore exert considerable influence on the number and siting of liquor outlets. Town planning and recreation departments are also well placed to encourage the development of alternative forms of leisure, which may prove an important consideration in long-term planning. The local authority does not have control over the pricing of alcohol.

CARRYING OUT THE STUDIES IN SCOTLAND: MAIN FINDINGS

The most comprehensive summary of how the research was carried out in Scotland and its findings is contained in the final report on the first phase of the project (Ritson et al. 1981a). An abbreviated version of this report was also prepared for wider distribution and use in local and national meetings to consider the implications of the work (Ritson et al. 1981b). A complete summary of the research was prepared as well for an earlier draft of the international report and is presented in Annex 38 of the phase I international report (Rootman and Moser 1983). A report on the second phase of the Scottish project was prepared by the collaborators (Ritson and de Roumanie 1982) and is contained in the international phase II report (Rootman 1983). This chapter is a rather more selective summary of the highlights of the Scottish project.

Research Methods

As stated by the collaborators, there were five principal aims of the research carried out in Scotland: to obtain a picture of existing drinking practices in Lothian, along with an understanding of prevailing attitudes toward alcohol and alcohol-related problems; to understand the level and form of alcohol-related problems in the general population and gain an insight into how such problems are coped with; to learn the views about and experiences of alcohol problems as seen by workers in various front-line agencies, such as social work and general practice; to obtain similar insights from those working in a more specialized way with alcohol problems; and to explore the level of alcohol problems among the clients of selected front-line and specialist agencies.

The collectively developed design described in the last chapter was followed with some adaptations to fit local circumstances.

The general population survey was based on a randomly drawn stratified sample of 608 men and 399 women, aged 17 years and over and living in Lothian. The sample included an excess of men because it was known that drinking and consequent problems were more common among men than women.

Interviews were conducted with 62 workers, drawn from 13 different agencies in the Leith area of Edinburgh, which is a well-defined community with a core of centrally based agencies. Wherever applicable, senior personnel in each agency were interviewed and other respondents were chosen randomly within each level of responsibility. The number of interviews conducted in each type of agency is given in Annex 38 of the phase I international report (Rootman and Moser 1983).

Studies of clients were carried out in five institutions in the Lothian region, namely a police station, an emergency and accident department, a psychiatric facility, a social work department, and a specialized alcohol treatment facility. In the police department, information

was recorded on 240 incidents, using a form adapted from the common one. In the emergency and accident department, 89 Case Report Forms, 15 Screening Annexes, and 6 Client Interview Forms were administered. In the psychiatric facility, 49 Case Report Forms, 43 Screening Annexes, and 6 Client Interview Forms were given. Twenty Client Report Forms and Screening Annexes were given in the social work department, and there were 11 client interviews. Finally, in the specialized alcohol treatment facility, 49 Client Interview Forms were administered. Thus, altogether, 398 Client Report Forms, 78 Screening Annexes, and 72 Client Interview Forms were given as part of the research carried out in Scotland.

Many difficulties that are described in detail in other reports on the project (Ritson et al. 1981a; Rootman and Moser 1983) were encountered during the course of the work. For example, it was found that, quite often, the procedures of agencies made it rather difficult to obtain representative samples of cases or clients. Each set of clients had a different pathway through the forms. For instance, almost all of the clients interviewed in the casualty department came there because of a specific incident, whereas this was true of almost none in the psychiatric and social work agencies. This meant that there was little justification for pooling these samples from the nonspecialized agencies for analysis and where it was done, it was only for purposes of illustration.

Although the above is only a very brief description of the research methods used in Scotland, it is perhaps sufficient to enable the reader to understand some of the major findings of the work.

The next section will present findings with regard to drinking patterns, followed by those pertaining to the cultural definition of drinking, alcohol-related problems, and community responses to such problems.

Drinking Patterns

Drinking and Abstaining

According to the results of the general population survey, the majority of adults in Lothian drink. Only about one-tenth of the sample reported that they did not have a drink in the last 12 months. Where the sample was divided into three broad drinking categories of abstainers, occasional drinkers, and regular drinkers, the distribution was as shown in table 3.

TABLE 3.--Percentages of respondents falling into each of three drinking categories in Lothian general population survey, by sex (respondents aged 17+ years)

	Males (percent)	Females (percent)
Abstainers (not consumed alcohol in year prior to interview)	6	15
Occasional drinkers (not consumed alcohol that week but had in preceding year)	15	37
Regular drinkers (had consumed alcohol in week preceding interview)	79	48
Base (weighted data)	(595)	(389)

Men were much more likely to be defined as regular drinkers than women. Abstinence was found to be rare in all but the elderly retired. Young people were more likely than older to be classified as regular drinkers, especially in the case of women. There was a much sharper rise in the abstention rate with age among women than among men; women over 60 years of age accounted for two-thirds of all female abstainers. It was especially noteworthy that 18 percent of women over the age of 50 years claimed never to have drunk, as compared with fewer than 3 percent of younger women. This suggested that Scottish women are more likely to drink now than in the past and are not just giving up drink as they get older.

Other demographic and socioeconomic variables were found to be less important in comparison with sex and age and distinctions between drinking categories. There was no difference between rural and urban residents in terms of these drinking categories. In fact, rural/urban differences generally were found to be minimal in the Lothian general population survey and hence were set aside in most of the Scottish analyses.

Frequency of Drinking

Among men, the largest group reported themselves as drinking "once or twice a week" (32 percent). The same was true among women, although an equally large group of women reported that they drank "less than once a month but at least once during the year" (26 percent). In general, men were more likely than women to report drinking frequently. Among regular drinkers, however, age had less of an effect on frequency than social class, higher education and income being correlated positively with increased frequency, especially among women. The latter may be explained, at least in part, by association between educational advantage, higher income, and youth, which were particularly closely related for women.

Quantity Consumed

About one-quarter of the men (27 percent) reported consuming over 20 units of alcohol per week (the equivalent of around 2 pints of beer a day). In contrast, only 3 percent of all women did so. In both sexes, but especially among women, the age group 17-29 years was most likely to report consuming large amounts of alcohol. In comparison with a 1972 study, the findings showed little change in reported consumption among men and a modest increase among women.

Table 4 presents the average values for men and women on four different measures of drinking behavior.

Men were more likely than women to consume greater amounts of alcohol on all dimensions considered. Relationships with other social and demographic variables were more complex, however. In summary, it appeared that among regular drinkers young men drank more

TABLE 4.--Mean values of specific drinking variables among regular drinkers in Lothian general population survey, by sex (respondents aged 17+ years)

	Males	Females
Days drinking	3.2	2.2
Average consumption per drinking day (units)	6.2	3.0
Total weekly consumption	21.6	7.0
Greatest daily consumption	8.9	3.7
Base	(471)	(188)

frequently than the middle-aged, reaching a peak at 3 or 4 days weekly in their twenties. There was a tendency for the number of days drinking to increase again as men get older, and it was suggested that it was probably no coincidence that the diminution comes in the years of maximum family responsibility. Quantities consumed per drinking day, however, declined steadily with advancing years. Education appeared to increase weekly frequency but reduced consumption per drinking day. This trend was also observed with men of higher socioeconomic status and social class. Manual workers did not report drinking more often than nonmanual workers. When they did drink, however, they reported drinking more. While amount varied with socieoeconomic status for men, in the case of women the relationship was with drinking frequency alone.

Circumstances of Drinking

The most common pattern to emerge was of young men drinking large quantities of beer in pubs in the company of male friends. In contrast, women appeared to do most of their drinking at home in the company of family members (often including spouse), and they drank mainly various spirits, sherries, and other fortified wines and whisky.

The data also provided some glimpses of a division between a "middle class" drinking culture and that of the rest of the population. In summary, lower socieoeconomic status groups appeared to drink in pubs and clubs, whereas the higher status group drank in hotels and their own (or others') homes. The female pattern was closer to the middle-class male pattern in its home-centeredness. However, there was a dramatic association between age and drinking in pubs for women. There was a virtual monopoly of drinking in pubs by the group aged 17-29 years. On average, they reported doing about two-fifths of their drinking in pubs, whereas the over-thirties reported less than one-tenth. Generally, it was found that the younger, wealthier, and more socially advantaged women reported drinking most heavily in comparison to other women. Clubs were found to be significantly more popular in the rural area than in the urban area studied. These clubs were mostly working men's clubs where the beer is somewhat cheaper and membership is commonly linked to occupations such as mining.

Although there were no significant rural/urban differences in companions chosen for drinking, rural females were somewhat more likely than urban females to drink with their spouses and less likely to drink with relatives.

Male regular drinkers were more likely than women to drink alone, although only 9 percent of the male drinkers fell into this category. Such solitary drinking, however, was concentrated in the over-50 group but even more markedly in those who were widowed, who reported doing over one-third of their drinking alone.

About one-third of the men described the occasion of greatest consumption of alcohol in the last month as a "social occasion" and "regular drinking session." Women were more likely than men to recount "social occasions" and slightly less likely to mention a "regular drinking session" as their occasion of maximum consumption. No other type of occasion was mentioned by more than 10 percent of either male or female drinkers. The most commonly recalled occasions of maximum consumption within the last year were Hogmanay or Christmas, mentioned by slightly more than a third of the male drinkers and two-fifths of the female. These exceptional occasions tended to last longer and result in greater amounts of alcohol being consumed.

Cultural Definitions of Drinking

Reasons for Drinking

As can be seen in table 5, the most popular reasons for drinking among drinkers in the Lothian sample were to celebrate and be sociable. Although the greatest emphasis was on convivial factors as a spur to drinking, the findings also suggested that drinking has some importance as a means of overcoming anxiety and social inhibition, particularly among the young. Male drinkers attached more importance to all reasons for drinking than did females.

TABLE 5.--Percentages of drinkers in Lothian general population survey reporting various statements as "very important" or "somewhat important" reasons for their own drinking, by sex (respondents aged 17+ years)

	Males (percent)	Females (percent)
Drinking is a good way to celebrate	54	46
It is what most of my friends do when we get together	53	41
I like the feeling of getting high or drunk	19	10
I drink when I feel tense and nervous	15	11
Drinking helps me to forget about my worries and my problems	15	9
Drinking gives me more confidence and makes me sure of myself	20	17
It is part of a good diet	10	4
I drink because there isn't anything else to do	9	3
Base:		
Minimum	(570)	(343)
Maximum	(572)	(344)

This was particularly evident among the heavier drinkers who, perhaps not surprisingly, advanced more good reasons for their habit. It was found that the more socially disadvantaged gave more salience to drinking for escapist reasons, whereas upper-class respondents stressed more positive, pleasurable reasons for drinking. It was particularly interesting that even those who abstained or drank very little gave similar reasons for drinking to those who drank regularly, which suggested that norms surrounding drinking are firmly established and widely agreed upon in Lothian.

Reasons for Not Drinking

Only two reasons for not drinking or being careful about drinking received majority approval from both sexes--drinking costs too much (considered important by more than 70 percent) and it is bad for your health (more than 60 percent). Paradoxically, abstainers and the heaviest drinkers were more likely than moderate drinkers to agree with the importance of reasons against drinking. It was thought that personal experience might have taught the heaviest drinkers to know reasons for not drinking, but it is equally probable that those who drink most are more likely to attach greater significance to any issues surrounding alcohol. The heaviest drinkers showed most concern about developing alcoholism, but they were not conspicuously concerned about losing control over their lives or damaging their health through drinking. Men of higher socioeconomic status were less worried about the financial implications of drinking but more concerned that drinking might interfere with their job. Older and poorer women found many more reasons for not drinking than those who were younger and of higher socioeconomic status. Better educated, younger, and wealthier women seemed to be the carriers of a new permissiveness among females in attitudes toward alcohol.

Attitudes Toward Drinking and Drunkenness

It was found that many people had somewhat ambivalent attitudes toward drinking, since majorities supported both positive and negative statements about drinking and drunkenness. Overall, women were more likely to agree with "anti-" drinking and drunkenness attitudes and less likely to endorse "pro-" drinking views than men. However, women drinking more heavily were more tolerant of drunkenness than were the lighter drinkers. Age appeared to make little difference regarding attitudes to drinking, but seemed to play more of a role with respect to attitudes toward drunkenness, the youngest age group being much less likely than the older to express anti-drunkenness sentiments. High-status respondents were more likely than those of lower status to have a more positive attitude toward drinking and a less positive attitude toward drunkenness. Attitudes became more tolerant as reported consumption increased, with an abrupt shift toward a more critical stance in the heaviest drinking category, a finding that is parallel to that noted above in regard to reasons against drinking.

Age and Sex Norms

The right to drink at all was granted to those aged 21, 40, and 60 years by nearly the entire sample, there being a slight tendency to favor 40-year-olds. It was granted nearly equally to males and females. For 16-year-olds of either sex, however, drinking was proscribed by most respondents, suggesting a sharp division at the age of majority between proscription and liberty to drink among Scots. Although approval of drinking to feel the effects of alcohol was substantially lower than approval for drinking per se in each age/sex category, the same patterns applied.

Women were consistently less tolerant of both drinking and drunkenness than men, and younger people were more tolerant than older. There was a tendency for individuals to be most tolerant to those nearest to them in age. Higher-status women were more likely to be tolerant of drinking among 16-year-olds than lower-status women, and the opposite was true of drinking among 40-year-old men. Among men, tolerance of drinking by women was positively associated with socioeconomic status. In general, it was found that, as consumption increased, judgments of the appropriate drinking behavior of all sex and age types became more tolerant. It was interesting to note that most people endorsed a view about the drinking of young people, particularly girls, that is totally out of keeping with actual practice.

Situational Norms

Drinking was most tolerated by both men and women at a party at someone else's house, followed closely by drinking at a bar with friends, and in turn by drinking with friends at home (more than 90 percent were willing to permit drinking in these circumstances). The same pattern applied with respect to permitting drinking enough to feel the effects of alcohol, although tolerance for feeling the effects was substantially less than tolerance for drinking per se in all situations. There was a very low tolerance for drinking at work (18 percent of men and 40 percent of women), in contrast to a relatively high level of reports of drinking enough to feel the effects of alcohol at work. Although it was found that females had lower scores on each item than males, the ordering of situations was the same for both sexes. The greatest tolerance of getting drunk was in the youngest age group. The higher socioeconomic groups showed themselves to be more tolerant of drinking in most situations. Respondents of the lowest social class seemed to have a narrower repertoire of occasions on which heavy drinking was permitted--largely in pubs. The tolerance of drinking in all situations, except when driving a car, increased with consumption levels.

Alcohol-Related Problems

Current Problems in General Population

As can be seen in table 6, the most frequently reported problems associated with drinking experienced by drinkers in the Lothian general population sample in the 12 months prior to

TABLE 6.--Percentages of drinkers in Lothian general population survey who reported experiencing certain troubles related to drinking in the past 12 months preceding the interview, by sex (respondents aged 17+ years)

	Males (percent)	Females (percent)
Personal:		
Felt that I should cut down on my drinking or stop altogether	22	6
Have awakened the next day not being able to remember some of the things I had done while drinking	25	7
Sometimes get drunk even when there is an important reason to stay sober	6	1
Have had my hands shake a lot the morning after drinking	6	1
Have been told by a doctor or health worker that the amount I was drinking was having a bad effect on my health	3	1
Have taken a drink first thing when I got up in the morning	7	1
Stayed intoxicated for several days at a time	2	0
Social:		
Felt the effects of alcohol while on the job	17	3
Have been ashamed of something I did while drinking	11	4
Got into a fight because of my drinking	5	0
Been told to leave a place because of my drinking	3	0
Have been involved in a road accident when I have been drinking	2	0
Have been involved in an accident at home when I have been drinking	1	0
Have been involved in an accident at work when I have been drinking	0	0
Base:		
Minimum	(579)	(360)
Maximum	(582)	(362)

the interview was loss of memory after drinking, reported by a quarter of the men and 7 percent of the women. The majority (two-thirds), however, reported that they had not experienced any of the listed problems.

As anticipated, every kind of problem was more common among men than women. All of the problems reported, whether personal (first seven) or social (last seven) in nature were less frequent with advancing years with the exception of drinking having had a negative effect on health. Most problems increased as consumption increased, and an extremely strong association was found between unemployment and self-reported problems: among those male drinkers who had not been employed at some stage in the year prior to interview, two-thirds reported at least one problem and 57 percent reported two or more. While personal consequences seemed to be little influenced by social class, social consequences were influenced very strongly, lower class respondents being more likely to report more social consequences than those of higher class. It was suggested that this could be due to the heavier episodic drinking which is more characteristic of lower class respondents and to the fact that those with fewer financial resources are probably less protected against certain social consequences of their drinking.

Lifetime Interpersonal Problems

About one-fifth of the men but fewer than 4 percent of the women had known anyone among their family or friends to comment adversely on their drinking at any time during their life. Parents and spouses were mentioned most often. Only 2 percent admitted to criticism at work, which contrasts interestingly with the 16 percent admitting having drunk enough to feel the effects at work in the last year. Eight percent of men, but no women, reported having experienced police problems related to their drinking at some time during their life.

Problems in Identified Client Populations

More than half of the clients interviewed in the specialized alcohol treatment clinic reported experiencing more than half the alcohol problems inquired about in the 12 months preceding the interview. In comparison with clients interviewed in nonspecialized agencies, and with heavier drinkers in the general population sample, clients in the specialized agencies were most likely to report experiencing various consequences of alcohol use with the exception of having difficulty with the police or other authorities or being involved in a road accident: clients in the nonspecialized agencies were more likely to report such experiences. Similarly, consumption of those in the specialized agencies was by far heavier than consumption by those in the nonspecialized group or in the general population. There were also differences in the attitudes between the three groups: among other things, respondents in th client samples were more likely than those in the general population to drink for tension relief. In the police station, it was found that drink was involved in about two-fifths of the cases where it was possible to make an assessment. The alcohol-related incidents peaked toward the end of the week and on Saturday and the times of day closely parallel to the closing times of pubs. The type of incident most likely to be drink related was usually minor.

Community Response

Attitudes Toward Treatment

As can be seen in table 7, there seemed to be strong support among respondents in the general population sample for a notion that some alcohol treatments are effective, combined with the notion that excessive drinkers should be punished.

These responses suggested that in Scotland popular opinion has been largely won over to a medicalized notion of deviant drinking. There was also considerable agreement with the idea that the family of a deviant drinker deserves financial help from the community. Perhaps as a reflection on the promotion of clinics and other agencies, coupled with the progress of the treatment of alcoholism, only a quarter of the Lothian sample reported that they would not know where to get treatment if they needed it.

TABLE 7.--Percentages of respondents in Lothian general population survey agreeing with certain statements regarding treatment, by sex (respondents aged 17+ years)

	Males (percent)	Females (percent)
There are treatments that often succeed with people with alcohol problems	83	86
There is not much that community leaders or the government can do about alcohol problems	36	36
A man who is always drunk should be punished	17	18
A man's drinking is his own business, and no concern of the community	49	51
If a man drinks and does not support his wife and children, the community should give them help	68	62
If you had a problem with your drinking, you would be ashamed to tell anyone about it	44	54
If you had a drinking problem in this community, everyone would soon know about it	75	78
If you had a problem with your drinking you would not know where to get help	45	49
You wouldn't want a place where people with alcohol problems get treated to be near where you live	37	35
If you asked for help with a drinking problem in this community, everyone would soon know about it	25	26
Base	(593)	(389)

On the other hand there seemed to be substantial stigma associated with alcohol problems. About half the respondents said that they would feel ashamed to tell anyone if they had an alcohol problem, and fully three-quarters indicated that people in their community would readily learn of someone with a drinking problem, an item which suggests the newsworthiness of such drinking and its would-be stigma.

The notion that treatment per se would cause word to spread was less often agreed with, though still believed by almost half the sample. Slightly more than a third would not want an alcohol treatment place near their residence. The notion that a man's drinking is his own business and no concern of the community was approved by half the sample. This frequency suggested that drinking behavior may be viewed in Lothian as a territory of private life over which community institutions and even the family have little legitimate say. The necessary warrant for overriding this barrier against intervention may well be found only in instances of particular problematic individuals even among confirmed deviant drinkers. This cultural belief may serve to keep those proffering treatment at bay.

As can be seen, differences between men and women in response to these items were not substantial, the largest difference being in relation to the item "if you had a problem with your drinking, you would be ashamed to tell anyone about it" where women were significantly

more likely than men to agree. Women who drank most heavily were most likely to be ashamed to go for help. Optimism about treatment was associated with age, the oldest group being least optimistic. Higher status individuals and women who were heavier drinkers expressed greater knowledge of where to get help. Urban residents were also more likely than rural to know where to get help. Women, older men, abstainers, and occasional drinkers were more likely to answer that they would be ashamed to tell of a drinking problem, as were those who lived outside the city. They also felt the same way about others' soon knowing if they had a drinking problem--a view shared particularly by those of lower socioeconomic status. Older people were more skeptical about the value of government or community leaders solving this problem. Higher-status-group members seemed to have more faith in the potential help that leaders might bring. The belief that people's drinking is their own affair was strongly held among members of lower socioeconomic groups. As a sweeping generalization, it was found that a less punitive but more interventionist approach was more likely to be favored by the young, middle class, and drinkers.

Sources of Help

Asked what treatment they would recommend if a friend or relative should ask their advice about a drinking problem, respondents did not give overwhelming support to any particular institution--more than half could name only one agency, and only about two-fifths could name at least two. Alcoholics Anonymous received most recognition (55 percent), closely followed by general practitioners (48 percent), and then a unit for the treatment of alcoholism (28 percent). Only about 5 percent recommended a social work agency, a psychiatrist, or a general hospital. Among males, those who were heavy drinkers were more likely to choose specialized agencies and less likely to recommend a general practitioner than lighter drinkers.

Responses to Public Events

With regard to intervention in four hypothetical occurrences involving drinking, over 80 percent of the respondents felt that bystanders should intervene in a situation where a man had fallen drunk in the street or a woman was unsteady through drink. In contrast, in a more serious situation, where respondents were asked whether a neighbor should intervene, only about one-quarter felt that it was appropriate. Men seemed keener than women on a neighbor getting involved. Also, in a serious domestic situation, intervention was seen as being much more the prerogative of the police or the authorities than of bystanders or relatives. Substantially fewer respondents felt that authorities should be called in less serious situations and were more prepared to advocate the intervention of relatives. Intervention by relatives was regarded as least appropriate in the case of a man hitting his wife. Almost all respondents felt that persons described in the hypothetical events had an alcohol problem and should be treated. It is doubtful, however, that treatment agencies themselves would draw similar conclusions from such incidents, which suggests an interesting disjunction between the public and professional view of areas of legitimate intervention.

It was clear that those of higher socioeconomic status favored more intervention by neighbors, bystanders, and, where indicated, by the police. Younger women proved more willing to assign responsibility to relatives than older women. It was also found that heavier drinkers were conspicuously unwilling to involve relatives, and this may perhaps be based on their own personal experience.

Informal Social Responses

Nineteen percent of the men and just under 4 percent of the women had reported that some friend or family member had at some time commented on their drinking. Altogether, only 3 percent reported that they themselves had ever talked to anyone about an alcohol problem of their own. A further 12 men and 4 women admitted that, although they were concerned that they had an alcohol problem, they had not actually talked to anyone about it. Of the few who had talked to anyone, most had spoken to a spouse, friends, or a doctor, and only in four instances had treatment been recommended. In most cases, respondents were told that they should reduce or stop drinking and were given no further advice.

Client Experiences

It was found that problem-drinking clients interviewed in both specialized and nonspecialized agencies were most likely to have come by way of their general practitioner. Among clients of the alcoholism treatment unit, the key contact at which the alcohol problem was identified was usually shortly before attendance. There was one important exception: general hospitals had often noted the alcohol problem years previously but no referral had been reported. This was in keeping with the unit's own observation that referral from general hospitals was surprisingly rare. Clients in the specialized treatment unit were more optimistic about the value of treatment than those attending the nonspecialized agencies, but at the same time more ashamed of their drinking problems and likely to feel that others would know about it. The nonspecialized agency clients seemed to favor a punitive approach to drunkenness.

Agents' Attitudes

A great deal of rich information was obtained from the interviews of personnel in the various agencies. Although it is foolhardy to attempt to capture the wealth of views expressed in a sentence, the overall impressions were of: a reasonable level of awareness of alcohol problems (the police were notably conscious of them); a feeling that more should be done in prevention; a personal sense of pessimism when confronted by the problem drinker; and a feeling of being unsupported by others in working with them. Most of the personnel interviewed felt that responding to drinking problems was not central to their own role (e.g. police and casualty departments) but wished that they had ready access to the help of counselors and other agencies. Specialized agencies, such as Alcoholics Anonymous, were much more optimistic about being able to help. Alcoholics Anonymous, in particular, seemed a very confident, self-contained agency. Without exception, all of the personnel interviewed stressed the importance of "motivation."

IMPROVING COMMUNITY AND NATIONAL RESPONSES IN SCOTLAND

Problems Posed by Alcohol in Lothian

Before going on to look at the implications of the project for future community plans, it is worthwhile to review briefly the problems which were identified. All of the problems were conspicuously more common among men. About one-fifth of the men had felt they should cut down their drinking at some time during the preceding year, and 11 percent had been ashamed of something they had done while drinking. This represents a considerable level of personal concern and consciousness about drinking, but there is no information about the nature of the triggers to these thoughts. 17 percent of men felt the effects of alcohol while at work, again a somewhat unclear phrase, but whether the individual was reporting being under the influence of alcohol at work or merely suffering the effects of hangover at work, either or both would suggest a considerable effect on efficiency and capacity to cope with the working day. Approximately 7 percent of men reported three or more personal consequences through drinking in the past year, and a somewhat similar number reported three or more social consequences of their drinking. All of these were much higher among young men; 16 percent of young men had reported two or more personal consequences, and as many as 42 percent of young men had experienced amnesia following drinking in the past year. While the problems reported by individuals in the general population survey may not have been conspicuously life-threatening or catastrophic, they do represent a sizable level of personal distress and concern directly associated with excessive drinking. This was particularly true among young men. There was also a not insignificant level of problems among young women.

The extent to which alcohol was involved in contacts with clients at various agencies revealed that approximately 40 percent of police work involved alcohol-related problems and that the same was true of 10 percent of casualty work and 18 percent of clients attending a general psychiatric outpatient clinic. As explained, in the Scottish phase I report (Ritson et al. 1981a) all of these reports were based on pilot studies with many imperfections. This

was particularly true of the study based on the social work agency, where as many as 55 percent of those interviewed were found to have alcohol-related problems.

Both the general population and a sample of workers in various agencies--either in the Lothian area in general or among the clients of their particular agency--were asked about their experience of alcohol-related problems. One-fifth of the women interviewed in the general population survey reported that they knew of a man hitting his wife when drunk in their community. Experience of a man falling in the street, a woman being unable to walk steadily because of drunkenness, and a man spending so much on drink that he could not support his family, were also relatively common experiences known to between 10 percent and 20 percent of the population. This again represents a knowledge of a reservoir of personal and public distress engendered by alcohol in Lothian.

All of the agencies interviewed were very conscious of the extent to which alcohol problems contributed to their workload. In some cases, for instance in the casualty department, it was estimated that alcohol problems constituted 20-50 percent of the work, which seemed in excess of that actually observed during the pilot study. It may be that those with alcohol problems are more troublesome and therefore create the impression of being more numerous (the experience of agencies such as the casualty department would seem to support this assertion).

It was very clear that the specialized agencies were dealing with only a small fraction of the variety of alcohol-related problems which presented in varying forms and at various agencies throughout the region. In no agency was it felt that alcohol problems contributed less than 10 percent to their daily work and in most the estimated contribution was much higher. Those working in the agencies mostly felt frustrated and pessimistic about their personal capacity to cope with clients presenting alcohol problems and were aware of the inadequacy of their own training in meeting the needs of these clients.

Most people in Lothian apparently drink moderately and come to no harm. Nonetheless, the above catalogue of problems does demonstrate a significant burden, both for the individual and for the community, posed by a sizable minority of drinkers who get into difficulties with alcohol from time to time. The background data prepared as part of this project have shown that between 5 percent and 8 percent of men in other Scottish communities have alcohol problems. Again, the level of problems, although not insignificant, is much lower among women. Approximately one-quarter of males admitted to a general medical ward in Glasgow were found to have alcohol problems (Quinn and Johnston 1976). Almost half of the cases with head injury were found to have a high blood alcohol level. The same was true for a similar proportion of self-poisoning cases among men. In addition, it has been observed that there are proportionately more hospital admissions with a diagnosis of alcoholism and deaths from cirrhosis of the liver in Scotland than in England. There is also a high level of convictions for drunkenness, reaching approximately 23 per 10,000 in Scotland. Such figures further strengthen the case for encouraging Lothian to develop a plan for responding appropriately to the range of alcohol problems which have been demonstrated.

Themes Suggested by Research

Age, Income, Changing Roles, and Alcohol Use

A number of striking themes were suggested by the research. The first such theme was the relation of drinking to age. The data clearly showed that drinking was generally regarded as permissible among all adults over the age of 16 years in Lothian and that such drinking was heaviest, and to a lesser extent most frequent, among young people. Teetotalers were most likely to be found among the elderly who, in contrast to some countries, are now a low status group in Scottish culture.

The declining use of alcohol with advancing years suggested at least two other related themes. The first was the link between available income and drinking. It was noted that among older individuals, particularly pensioners, who have less money, considerable importance was attached to cost as a reason for not drinking by most respondents. This

suggested that the cost of alcohol is an important counter to excessive drinking. The other theme was the influence of changing roles and responsibilities with advancing years. While marriage did not appear to have an immediate influence on the drinking patterns of young men, it did so as they became older.

Alcohol Problems and the Family

The latter observation introduced a further theme, namely, the effects of alcohol on the family. When considering problems caused by alcohol and the community response, it was evident that the consequences of excessive drinking were most often referred to in the family either by the spouse or parents of the respondent. The family, therefore, seemed to be the battleground where drinking problems are most commonly addressed. This is of particular concern when the role of women is undergoing rapid change. The changed habits and attitudes of women may prove crucial in predicting the socializing influence of the family as far as drinking norms are concerned in future years.

Unemployment, Leisure, and Alcohol Problems

Another key theme was that of employment/unemployment, which is particularly important at present in Britain. As the reader will recall, a high level of alcohol-related problems was observed among those who had experienced periods of unemployment in the year of the survey. It was suggested that, if unemployment is associated more with poverty of lifestyle than with absolute economic destitution, it may be a breeding ground for excessive drinking with resulting casualties in an already vulnerable population. Related to this, and to trends in other work in developed countries, is the issue of management of leisure time. The question is raised of whether or not drinking, which is currently a major leisure activity, will increase with amount of leisure time.

Attitudes Toward Drinking and Drinking Problems

The data on attitudes toward drinking showed considerable uniformity of opinion between groups whose actual drinking practices were quite different, e.g., men and women. Although the emphasis on convivial factors as a spur to drinking was no great surprise, the findings demonstrated also that drinking has some importance as a means of overcoming anxiety and social inhibitions, particularly among the young. It was also suggested that the ambivalence of Scottish culture toward drunkenness was well demonstrated by the sizable percentages feeling that a drunk can be both an amusing and a disgusting sight. Health and fear of alcoholism did not seem to be particularly important factors influencing the drinking habits of young people, but the latter fear was more significant among heavy drinkers. This suggested that education campaigns that focus on alcoholism per se would be seen as rather remote from the life of the everyday drinker.

With regard to community responses to alcohol problems, there was a uniformity about responses concerning appropriate drinking on different occasions by individuals differing in age and sex. There was greater flexibility in attitudes to drinking by younger and middle-aged men. Drinking, and even drunkenness, was acceptable on social occasions, but not at work and particularly not when looking after young children or driving a car. With regard to the latter, standards obviously differed markedly from practice; it was evident that the population knows it should not drink and drive, but some more subtle influences changed this judgment when faced with the real situation. The conclusion was, however, that Lothian is a community in which drinking norms are well established and largely agreed upon.

Attitudes Toward Intervention

When these norms are seriously broken, the data suggest that there is a tendency to invoke official rather than personal intervention. The respondents in the general population sample tended to see Alcoholics Anonymous, general practitioners, and, to a lesser extent, units for the treatment of alcoholism, as their primary ports of call in the event of alcohol

problems. It was noted with interest that this view diverges strongly from the prevailing specialist view in the study area, that alcohol problems should be the concern of a wide range of agencies. Even among agents themselves, however, there was a tendency to involve specialist help and to feel personally powerless in the face of alcohol-related problems. The agents mostly combined a high level of sensitivity to alcohol problems with an almost equal level of pessimism about their own capacity to influence them. On the other hand, they noted a heartening willingness among all of the groups studied to give alcohol problems a high priority among community concerns.

Levels of Drinking Problems

The problems of the clients of the specialized treatment units were found to be very different from those even of the persons drinking most heavily, as reported in the general population survey, and the clients of nonspecialist agencies who had alcohol problems appeared to have drinking patterns somewhere between.

These reflections on the findings helped to identify some of the implications for improving local and national responses and for carrying out future studies.

Implications of the Scottish Project for Action

A number of implications of the project for action at both local and national levels were identified by the Scottish collaborators on the basis of the phase I research. This project, however, was not entering virgin territory in Scotland. It was rather seen as one contribution within a series of programs and reports on alcohol problems in Scotland.

Implications for Improving Local Response

An immediate plan for dealing with alcohol-related problems in the Lothian region already existed at the time the first phase of the Community Response Project was completed in Scotland. This plan was contained in the report of the Committee on Alcohol-Related Problems (CARP), whose members were drawn from the Lothian Health Board, the Lothian Regional Council, and local voluntary organizations. The principal collaborator in the Scottish project was one of the representatives of the Lothian Health Board on this committee and was the chairman of a subcommittee on community alcohol teams that prepared a section of the report. The report focused on detoxification/rehabilitation, hostel provision, and the community alcohol team, the latter being most closely related to the work and philosophy of the present research project.

The CARP put forward the following proposals, which were seen as a first step in developing a more far-reaching strategy for dealing with alcohol-related problems:

- improve "dry" social facilities;
- extend range of beverage choice in pubs;
- establish a centrally situated alcohol clinic that has ease of access and no stigmatizing label;
- develop consultation sessions within health centers;
- health educators to include alcohol education in general and health education programs to raise overall level of public sensitivity to alcohol use;
- health education to be focused on front-line care-giving agencies throughout Lothian;
- develop joint union/managerial agreements in industry to create alcohol treatment policy for all employees;

- explore other approaches such as fiscal control, granting and extension of licenses, and siting of pubs;

- further develop domiciliary detoxification.

Each of these suggestions found an echo in the views expressed either in the general population survey or, more strikingly, by workers in agencies.

In particular, the implications of the research for education were significant. As mentioned, the research showed considerable agreement about drinking norms and attitudes. It also showed an awareness of alcoholism, public acceptance that it can be treated, along with professional wariness about its treatability and a certain reluctance to become personally involved with drinking problems. There was also a general acceptance of certain rules, such as not drinking and driving, or not drinking much at work. These societal standards are not replicated in behavior and it is evident that education would have to advance beyond the level of knowledge that currently exists, toward a more fundamental internalizing of these attitudes so that they become part of the behavioral standard.

As also mentioned, in the eyes of the public and of many agencies, the problem drinker is synonymous with the alcoholic, and the most popular concept of alcoholism accords with its being a distinct entity amenable to specialist, often medical, responses. This caricature did not accord with the view of alcohol problems favored by specialists and reflected in the CARP proposal. This suggested that plans that place greater emphasis on the early recognition and management of alcohol problems would need to be thoughtfully presented if they were to be accepted.

Front-line agencies revealed almost unanimous pessimism about their capacity to help the problem drinker. Similar findings were reported by Shaw et al. (1978) in London. This contrasts with the relative confidence of specialized services, but it would be unrealistic to promote the growth of specialized services at a time when there are doubts about the worth of elaborate treatment approaches (Orford and Edwards 1977). The collaborators suggested that a more economic approach, designed to reach a larger number of problem drinkers at the stage when they first make contact with front-line agencies, would be to use specialist agencies to train and support the nonspecialist services.

The concept of the Community Alcohol Team envisaged in the CARP report recognized the pessismism about therapy found in many agencies and would combine education with support and advice in specific cases, so that front-line workers would see by their own efforts that effective intervention was possible. The research suggested the need to focus on enhancing morale and therapeutic effectiveness rather than generating awareness about alcohol problems.

The sheer frequency of alcohol problems was of significance to some agencies, notably the police, but possibly also to the social work team. In the casualty department there was an impressive number of cases in which alcohol was an important factor, but the nature of the setting rendered elaborate intervention inappropriate.

With regard to informal community responses, the findings suggested that the family was a fertile ground for intervention, but there was little evidence to suggest that such intervention is effective. Nevertheless, the collaborators noted that educational and service endeavors that highlight the role of family members' responsibility to each other might be appropriate. Bystanders and neighbors were considered of little significance in the Lothian region as far as responding to drinking problems was concerned. This accorded with the common acceptance of drinking as being a personal matter and not the concern of anyone else. The collaborators concluded that a shift in this constellation of attitudes could promote a more interventionist community that might be less reliant on official agencies.

They noted that it was encouraging that existing specialist resources seemed quite well known, the possible exception being the Local Council on Alcoholism, which might wish to advertise its services more widely. This, however, would be feasible only if its resources expanded to meet any consequent growth in demand.

The collaborators also pointed out that the frequent request of nonspecialist agencies for ready availability of specialist help would be in keeping with the proposals for the community alcohol team.

They felt that augmented in-service and undergraduate training for professionals likely to encounter alcohol problems was a clear need. The importance of providing more training and liaison opportunities for the police was evident, particulary in view of the very large number of alcohol-related incidents which they encountered. The research further suggested that the police should play a more prominent part in the work of CARP than previously. The detoxification/rehabilitation facility evisaged in CARP should prove a particularly useful resource for the police.

Finally, the collaborators stressed that links between local and national planning were important in terms of commitment to joint funding and management. A unity of direction between national and local planning would facilitate central government funding.

Implications for Improving the National Response

The Scottish collaborators felt that it would be presumptuous to suggest that a single research project and a community plan should lead immediately to a revised national plan. Rather, in their opinion, the research should be seen as a part of the growing understanding of drinking habits and problems in Scotland and that the community response in Lothian would hopefully prove to be of relevance to other similar communities in Britain and elsewhere.

As was the case at the local level, a plan for dealing with alcohol problems at the national level also existed in Scotland at the time the first-phase research was completed. This plan was developed by a working party on community services for alcoholics appointed by the Professional and General Services Committee of the Scottish Council on Alcoholism, which was chaired by the chief investigator of the Scottish project team. This plan emphasized the importance of creating a framework within which front-line workers would develop skills in responding to alcohol problems when they first arose. According to the report:

> The shift toward community workers accepting prime responsibility for responding to alcohol-related problems can only be achieved if these frontline workers are adequately supported in a practical way by a team with specialist knowledge and skills concerning alcohol problems. Within each district health authority there should be a team containing relevant specialists, from, for instance, psychiatry, social work, nursing and clinical psychology. The size of the team would depend on local conditions. This team would be concerned with developing a network of support for the problem drinker and his family, helping the front-line workers recognize and cope with problem drinkers and their families and be available for consultation and advice concerning particularly complex cases. Voluntary counsellors where available would also play an integral part in this organization.
>
> The Community Alcohol Team should provide a forum where local experience of community problems and their implications for alcohol misuse could be shared with the specialists' knowledge, including the available and appropriate resources in their area. Although it is assumed that it would spend much of its time working in and with existing agencies in the area, the team would require some independent office accommodation from which to operate. It is essential that the team members retain links with specialist facilities such as hostels and specialist units. In many cases this would be most easily achieved by creating joint appointments or seconding individuals from the specialist facility to the team.
>
> The components in the plan can amount to a complex and sizable organization. This is particularly so in an urban area. [Figure 6] illustrates one way in which these services might relate to one another. The Community Alcohol Team would have responsibility for fostering the links between these facilities and ensuring that the client does not get lost in the system or lose the important

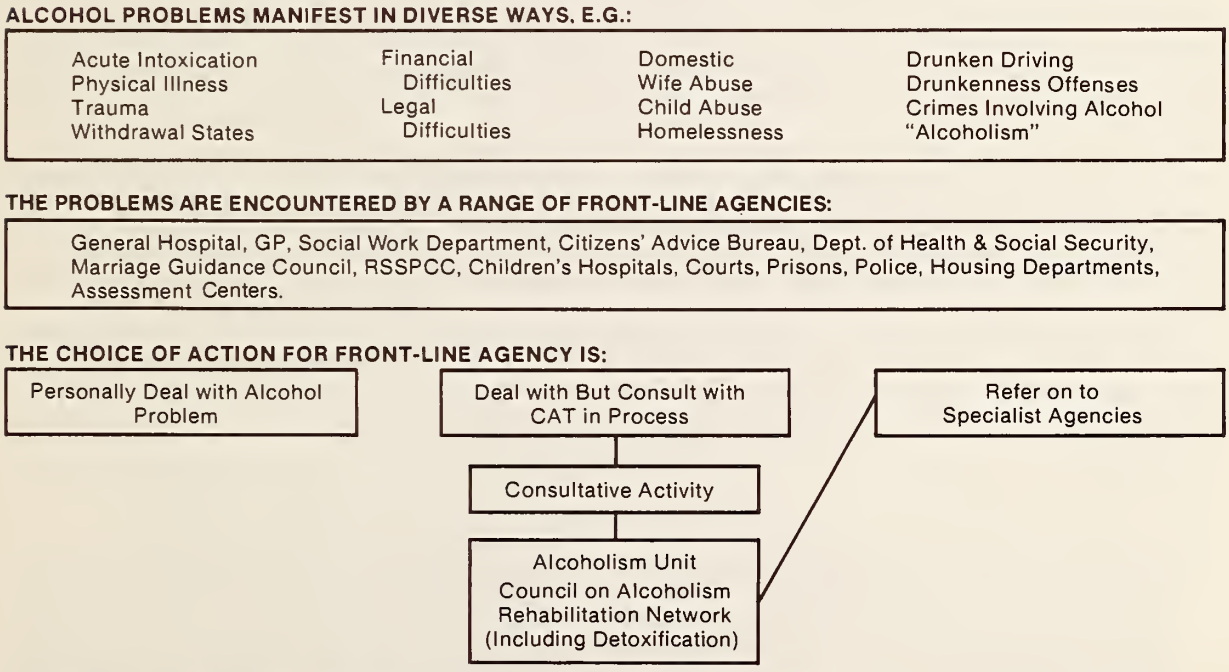
individual sustaining contact of the primary agency, without which the alcoholic quickly feels he is simply being shunted on.

Such plans were the subject of consideration with the Scottish Home and Health Department and were discussed informally with them by the Scottish collaborators. The collaborators felt that many of the above-mentioned implications for improving local response to alcohol-related problems also pertain at the national level, particularly implications for prevention and education.

The issues of the relationship between central and local planning and coordination between central government departments are discussed in the Scottish Council on Alcoholism Report as well as in the Scottish final phase I report (Ritson et al. 1981a). It was pointed out in the latter that local authorities understandably guard their independence while relying quite heavily on central funding by way of a rate support grant. The balance between autonomy and central direction is difficult to strike and can lead at worst to a ritual buck passing, while both groups avoid shouldering the financial burden of adopting a plan for alcohol problems. It was suggested that links between central and local bodies can be facilitated by voluntary agencies such as the Scottish Council on Alcoholism, which have a greater freedom of movement across administrative boundaries.

It was further stressed by the collaborators that coordination between government departments is central to the effective implementation of a plan to deal with alcohol problems based on the project. They noted that it was obvious that alcohol use and misuse have implications for a wide range of different interests, such as treasury, trade, employment, education,

FIGURE 6
Components of a Community Response to Alcohol Problems



Source: *Scottish Council on Alcoholism, 1979.*

Source: Scottish Council on Alcoholism.

health, and social work. They suggested that it was therefore necessary to devise some means of drawing representatives from these departments together to look at the accumulated evidence about alcohol in Scotland and consider its implications for their own sphere. There is no such forum within Scottish central government and no national plan in relation to alcohol. It was suggested that, at their simplest, the findings could usefully be employed as a focus for discussion between the relevant departments from which the national response could grow.

Although the collaborators felt that it was premature to talk of a national plan, the evidence of the project, taken along with several other recent reports, made it clear that Scotland had not taken stock of its collective responsibility for its level of drinking and alcohol problems. This responsibility extends beyond government departments into industry advertising, urban planning, education, religion, and so on. They suggested that it would be timely for those concerned about these different facets of alcohol to consider their own part in the total picture.

For example, they noted that it was evident that "cost" was already seen as an important consideration in the minds of those interviewed in the general poulation survey. If such an attitude exists even at a time when alcohol is relatively cheap in terms of disposable income (Kendell 1979), then this suggests that many people are prepared to respond to price increases by reducing their consumption. This, of course, presumes that attitudes and reason would in fact influence behavior in the face of such a rise. While there is some evidence that this is so, the collaborators indicated that they did not know which part of the population would be most affected by such a price rise. Nonetheless, they felt that it did seem that current research would give ground for encouraging Scotland to look more closely at the relevance of fiscal controls as a means of influencing consumption. The evidence also suggested that education focusing on sensitizing individuals to the cost of alcohol could prove a fruitful strategy.

Implications for Research

Suggestions were made by the collaborators for further analyses of the existing data as well as some future related studies.

Regarding further analyses, it was suggested that additional consideration should be given to the internal coherence of the data, and the construction and analysis of multi-item scales, as well as some further analysis of data in relation to the themes mentioned above. For example, it might be useful to track the concern about the influence of unemployment on drinking habits, not only through the general population survey data, but also into the opinions of the agents and clients themselves. Women's drinking might also be explored, to tease out the other changes that cluster around their increased alcohol consumption and the attitudes to the latter. Factor analysis could be employed to suggest items that are associated with particular problems and the relation between personal consequences and social problems should be examined. The links between attitudes and habits might also be explored further, as well as data concerned with problems and their management within the family. The transcripts of interviews with the agents might be examined in a more structured way.

As for future studies, the following were thought to be of immediate relevance:

- future monitoring of the general population: it would be useful to sample other populations at intervals so that trends could be established and identified early;
- follow-up of a sub-sample of the present general population sample, particularly the heavy drinkers;
- detailed study of social workers' clients: this could well employ observational as well as more conventional interview techniques;
- examination of the association between employment and consumption--initially those reporting periods of unemployment during the year of the survey would be followed up,

and this would later be extended to describe the consequences of unemployment when a group of workers are made redundant;

- study of the family and the changing drinking habits of women--this would have to be sufficiently closely focused to detect how informal controls develop in a family network.

Action Taken to Improve the Response to Alcohol Problems in Scotland

A number of actions were taken by the Scottish team to attempt to improve responses to alcohol-related problems at local and national levels based on the experience of the project. As was the case in the other two countries, the team monitored these actions during the second phase of the project. In particular, they documented the process by keeping a diary of events as well as by producing minutes and reports and keeping copies of pertinent materials. The results of this monitoring are presented in full in the international report on phase II of the project (Rootman 1983). They are summarized briefly here.

Action

During the first part of 1981, the main activity was to present the results of the first phase of the project to community agencies that had participated. A number of these informal feedback sessions led to more formal "teaching" seminars with social workers, general practitioners, and voluntary counselors.

An important local event in relation to the project was a meeting of local officials in Lothian in June 1981 to discuss the project explicitly along with another related project (a study of interorganizational relations). In general, it was found that there was a great deal of similarity in the findings of the two projects. Among the proposals that emerged out of the discussion were: calls for continued coordinated action as started by the Lothian Committee on Alcohol-Related Problems, an emphasis on the importance of key persons and of involving voluntary agencies, a recognition of the need for public information carefully geared to community requirements, and an endorsement of the need to consider some aspects of community demands at the national level. Following this meeting, action was taken on a number of these proposals.

The CARP group has been particularly active, focusing much of its attention on development of a designated place for habitual drunken offenders. This focus was in response both to the opportunity afforded by the change in the Criminal Justice Act allowing the police to bring habitual drunken offenders to a designated place for detoxification, and also by the possibility of obtaining central funding for a project that would have little chance of attracting local funds at a time of severe financial crisis. The work resulted in the establishment of a new voluntary organization drawn from CARP to lobby for this proposal. This allowed the remainder of the CARP committee to concentrate on other items such as prevention and the establishment of Community Alcohol Teams. The findings of the community response research were reported to the members of CARP as they became available. The CARP group also produced a detailed feasibility study for dealing with alcohol problems in the Lothian region, which draws on experiences of the community response project (Rootman 1983, appendix II, annex 3.2).

Another particularly active local body in which the community response team has been involved is the Edinburgh District Council on Alcoholism (EDCA). In accord with its responsibilities for providing counseling for alcohol problems and drawing from the community response study, EDCA promoted a system of "outposting," which consisted of counselors working in other agencies in Edinburgh. In the period monitored, such service became available in two health centers, a women's hostel, and a day center in the Craigmillar area. The EDCA also agreed to the development of a counseling service in West Lothian, an area of high unemployment. Specifically, in 1982, they employed a community development officer in the area to stimulate coordination between existing agencies and look at alternatives to drinking.

In addition, the Council developed an alcohol education package for primary schools which is now being more widely piloted in other parts of the country. It also developed a package

for secondary schools that has not as yet been as successful as the primary school package. The EDCA also attempted to develop counseling and education services for industry in the Lothian region over the time period. The principal investigator of the community response project was involved in all of these activities. In 1982-83 a series of seminars were held with major employers in the region, and some regular counseling services have resulted.

The Alcohol Problems Clinic at the Royal Edinburgh Hospital, which is under the direction of the principal investigator in the community response project, was also involved in a number of activities stimulated by the project. In particular, the Clinic invested an increasing amount of time in working with the front-line professionals, particularly general practitioners and social workers. The Clinic is also carrying out a major evaluation study comparing "brief" with "optimal" treatment for alcoholism.

The members of the community response team were also involved in encouraging the development of in-service training on alcohol problems among social workers in the Lothian region. Specifically, the two social workers attached to the Alcohol Problems Clinic were given major responsibility for meeting regularly with each of the area teams in the city, helping them to develop their awareness of alcohol problems, consulting with them about their cases, and on occasion, offering direct service or referral to the Clinic for clients presenting particular difficulties. The part of the community response project that identified the prevalence of pessimism in front-line workers was a useful spur to this activity.

With regard to general health services, the team reported the implications of their findings at a number of meetings with doctors in the Lothian area. Partly as a result of these meetings and other papers coauthored by the principal investigator (Ritson and de Roumanie 1982), physicians with nurses in the Lothian region appeared increasingly to recognize that they can provide help (for instance, with detoxification) to the patient in his or her home. A community charge nurse was appointed to the Alcohol Problems Clinic in 1982 to train community nurses in domiciliary detoxification.

Over the course of the period monitored, the team also discussed its findings with a number of other groups in the Lothian region including the police, a marriage counseling service, an organization for the recently bereaved, and a group concerned with improving liaison between agencies that provide services to people with alcohol-related problems.

Action at the National Level

A national meeting to consider the implications of the community response project for Scotland and the United Kingdom was held on February 22, 1983, in Edinburgh. It was organized by the Scottish Home and Health Department and the United Kingdom Department of Health and Social Security in collaboration with the World Health Organization. About fifty people from various parts of Scotland and the United Kingdom attended as well as observers from nine European countries.

The objectives of the meeting were:

(a) to present, review, and discuss the Lothian part of the community response project; and

(b) to exchange information, knowledge, and experience of alcohol-related problems with emphasis on the following four main areas:

- the collection, dissemination, and use of data on alcohol-consumption and alcohol-related problems
- public awareness and understanding
- preventive strategies
- coordination of activities

The major findings of the community response project were presented to the meeting by the collaborators. In addition, the results of a follow-up study of a sample of the regular drinkers interviewed in the original general population survey were presented. Among other things, this study found that heavy drinkers reduce their consumption when the price

of alcohol rises at least as much as light or moderate drinkers and that this reduction in consumption is accompanied by a commensurate reduction in adverse effects. It was suggested therefore that increasing the excise duty on alcoholic beverages was an effective means of reducing the undesirable consequences of excessive consumption.

In discussion of the findings of the project and the four main areas, the following suggestions for action were put forward:

- Resources for helping those with alcohol problems were still inadequate. Additional funds should be forthcoming via, for instance, improved joint support funding for individual projects.
- There was a need for social work, health, and voluntary agencies to cooperate in helping particularly the socially disadvantaged alcoholic.
- The purely drunken offender . . . could be dealt with by removal to an appropriate reception center or designated place.
- The Government should be encouraged to make more funds available to act as a stimulus for community action.
- A national forum might form one place in which a general debate . . . could continue.

In summing up the meeting, the need to continue to work to translate research into action was noted as was the difficulty of achieving a productive working relationship between the local community and the national response to alcohol problems. The tension between the distilling industry and the growing concern about alcohol-related problems in Scotland was also stressed. It was recommended that participants with a concern about alcohol-related problems should strive to achieve a clearer and more sensitive understanding of government and the processes by which policy decisions are made.

A full report on the meeting is contained in the final international report on phase II of the community response project (Rootman 1983, appendix II, annex 3.3). The meeting was covered by newspapers in Scotland and England and debate on the issues raised has continued since the meeting.

A number of other national activities related to the project also occurred during the time period monitored. Most of these events involved the presentation of findings of the project to professionals and other interested groups. In particular, the findings of the project were presented to the British meeting of the Transcultural Psychiatry Society. They were also presented to the Scottish Research Group, the Alcohol Studies Center in Paisley, and a meeting of the Scottish National Party. In addition, the principal investigator met with the Scottish Health Education Coordinating Committee which showed an interest in the project in relation to their proposed education campaign focused on social workers and medical practitioners throughout Scotland. Such meetings, while not necessarily leading directly to policy proposals, have resulted in the dissemination of findings of the first phase of the project to a national audience.

ASSESSMENT AND FUTURE DIRECTIONS IN SCOTLAND

Assessment of the Project in Scotland

Phase I

A comprehensive assessment of the first phase of the project in Scotland is contained in the final Scottish report on phase I (Ritson et al. 1981a) Among other things, the Scottish collaborators suggested that the general population survey took so much time that other components of the research, especially the client study, suffered. They also indicated that more time might have been devoted to community development activities during the first

phase if less time had been required by the general population survey and if someone had been assigned to focus most of their efforts on such activities.

They also discussed the tension between the national and international needs of the project. They noted, for instance, that normally they would not devise interview schedules in the pressurized setting of 1-week working group meetings. Although in retrospect they felt that this was a relatively successful and "mind expanding" approach under the circumstances, there was perhaps some loss in terms of refining instruments and particularly in agreeing on definitions of terms.

In addition, the project collaborators expressed some regrets that they did not identify a truly rural population for study and that they did not focus more on the study of organizational structures and relations. Nevertheless, overall, the Scottish collaborators felt that their participation in the first phase had been extremely valuable in that they had collected and analyzed a great deal of extremely interesting material on drinking and associated responses in the areas studied and had as a result developed useful suggestions for further actions in improving responses to alcohol problems in the study communities and at the national level in Scotland.

Phase II

As is the case in Mexico and Zambia, it is extremely difficult to arrive at a definitive assessment of the activities carried out in phase II of the community response project in Scotland. This is true because these activities are still ongoing and because many are inherently difficult to evaluate. It is also difficult to determine what changes can be attributed to the research findings and to the influence of the project. As the principal investigator in Scotland noted: "The project is merely one factor amongst many trends and developments, nationally and locally which have contributed to the evolution and on occasion, a dissolution of services and preventive strategy." Nevertheless, some evaluative conclusions seem warranted.

One conclusion is that the project has stimulated a considerable amount of interest, especially at the local level in Scotland. This is evidenced by the wide range of community agencies that requested and received reports on the findings of the research. Whether this was due to the inherent interest of the research itself or to the fact that the principal investigator was extremely well connected with community agencies is not known. It is certainly true, however, that the project has had widespread exposure.

It would also be fair to conclude that the project has had some specific impact on thinking about alcohol-related problems in the Lothian region and in Scotland. Two findings of the research, in particular, seem to have stimulated some policy and program discussion. The first was the finding of the relationship between unemployment and alcohol problems which is now being considered by several groups in a position to make policy and program decisions, including the Scottish National Party, and the Edinburgh Medical Group. The second was the finding on pessimism of service providers which is now being considered by various medical and social work groups in Great Britain. While action in these areas might have occurred anyway, it seems reasonable to ascribe at least some of them to the findings of the study and activities of the study team.

Another conclusion of the Scottish project is that the studies carried out did not result in the development of full-blown, well-articulated plans for improving responses to alcohol problems either at national or local levels. They did, however, result in the focusing of some additional concern on alcohol-related problems, in the production of some materials for focused discussions, and in the generation of some suggestions for improving some aspects of responses to such problems.

As noted by the principal investigator, "the absence of funding makes it difficult to show direct linkage between the community response project and future developments, but the influence of its philosophy is clearly evident to me and I think to others."

Plans for Further Activities in Scotland

As mentioned, some of the activities that have been described are ongoing and are expected to continue. In particular, the Scottish team plans to continue the research on the relationships between the real cost and consumption of alcoholic beverages; and to continue working with the various agencies in the Lothian region, placing an increased emphasis on preventive approaches. Through the Scottish Health Education Coordinating Committee, the principal investigator is working toward establishing a model for education of primary level workers and the general population which could be adopted by each region in Scotland. He also has been asked to chair a series of meetings to prepare a simple advice package for drinkers which can be given to them by their general practitioners along with recommendations for sensible drinking. In addition, the team is hoping to undertake a project on alcohol problems in the family setting which could be linked with other WHO initiatives in this direction. Finally, it is expected that the team will advise other groups in the United Kingdom and Europe waiting to undertake activities similar to those carried out in Scotland.

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CHAPTER 4

EXPERIENCE, FINDINGS, AND IMPLICATIONS OF THE PROJECT IN MEXICO[1]

BACKGROUND

Mexico as an Example of a Rapidly Changing Country

Mexico is an example of a country undergoing rapid socioeconomic and demographic changes. Despite its affinity with other Latin American countries to the South, it is inevitably influenced by its Northern neighbor, the United States. A study of the Mexican situation concerning alcohol problems, it was felt, would reflect many of the difficulties to be faced in other rapidly changing countries, not only in Latin America, but also, for example, in the Western Pacific region. Moreover, since Spanish is one of the three main working languages of WHO and is spoken by a high percentage of the world's population, the research instruments and reports prepared in that language could be expected to be of widespread value.

The population of Mexico, amounting to nearly 51 million in 1970, was estimated at over 65 million in 1980. It will almost double by the year 2000, reaching 132 million if the present growth rate (one of the highest in the world) of 3.5 percent per year (UN 1976) continues. Although with its area of nearly 2 million km^2 the population density should not be unduly high, the pressure is building up rapidly in the urban areas (more than 10,000 inhabitants), which in 1976 accounted for 64 percent of the total population (UN 1976), compared with 20 percent in 1900. Mexico has the biggest population of any Spanish-speaking country, and Mexico City, the capital, has the third largest population of any city in the world (12 million in 1980, compared with 7 million in 1970) and could well reach the projected 30 million mark in the year 2000. These increases have resulted largely from a very high birth rate (42.1 per 1,000 population in 1970) and a decline in mortality (7.5 per 1,000 population in 1974, compared with 23.2 in 1940). The expectation of life at birth more than doubled between 1900 and 1970, when it reached 63 years. More than half of Mexico's population was under the age of 20 years in 1970 and one-third under the age of 10 years; fewer than 6 percent were older than 60 years. In 1977, 46.2 percent of the population was under the age of 15 years.

Most of the population are mestizos, of mixed Indian and European descent, and there is much pride in both the Spanish and Aztec influences from the past. Spanish is the main language of the country, although about a million of the more isolated inhabitants speak only local dialects. The literacy rate rose from about 43 percent in 1940 to 70 percent in 1970, and is high compared with other Latin American countries. With the invaders in the 16th century came Roman Catholicism, which still has a very strong hold over most of the country. Despite the urbanizing process, 38 percent of the economically active population in 1970 were agricultural workers.

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[1] The material in this chapter is based largely on the final reports of the project prepared by the collaborators in Mexico (Calderon et al. 1981; Campillo et al. 1982).

Unlike most of the Latin American countries, Mexico has had no revolution for more than 50 years and this is reflected in the country's economy. Between 1965 and 1975 the gross national product nearly quadrupled and the income per person nearly tripled. The numbers of both vehicles and telephones in the country also tripled between 1965 and 1974. In the 4-5 years after 1970, industrial, agricultural, and petroleum production doubled. However, as in other Latin American countries, the wealth is very unequally distributed, and the big migrations from rural to urban areas have led to high unemployment among the recently urbanized population and difficulties resulting from a changing way of life.

According to the Constitution of 1980, Mexico is a democratic and federal republic comprising 31 free and sovereign states and the Federal District. Both the national and local governments are energetically seeking solutions for the problems attendant upon rapid social and economic change, and communities themselves are involved in these efforts through community development centers.

Alcohol Use, Alcohol Problems, and National Responses

Historical

Until the Spanish Conquest, Mexico was ruled by the Mayas and the Aztecs, native Indian peoples whose high level of civilization was beginning to decline after almost 20 centuries. In their religion, a leading role was played by the gods of drink and drunkenness, known as the 400 (or innumerable) rabbits, the most prominent being Mayahuel, the goddess who is linked with the discovery of "octli" or "pulque" as it is now known. This alcoholic beverage is made by fermentation of the maguey cactus, Agave americana, and in pre-Hispanic times the drinking of pulque, except by old people, or during certain ceremonies, was considered a crime. A person born under the sign "two rabbit" was expected to become a drunkard, "one whose only goal was wine; he would drink when he woke up in the mornings; he would be able to think of nothing but wine, and thus he would go about drunk every day; he would drink even during fast days; as soon as day broke he would go to the tavern and ask for free wine; and he could find no peace without wine" (Sahagun, cited in Calderon 1968). Public drunkenness was punished severely and for a nobleman could lead to the death sentence.

After the establishment of Spanish rule, in 1521, along with important changes in the society there was stated to be a rapid increase in alcoholism.

Availability of Alcoholic Beverages

The alcoholic beverages available have become more diversified and the most widely produced are: beer, spirits (made from sugar cane or grapes, and tequila) and pulque. Distilled spirits made from sugar cane or grapes are widely used for mixing with soft drinks or coffee. Relatively small amounts of wine are produced.

Very little reliable information is available on the quantities of alcoholic beverages available but, according to the General Directorate of Statistics in 1977, alcohol production included 2,174 million liters of beer, 263 million liters of pulque, 87 million liters of brandy, 51 million liters of tequila, 7 million liters of common spirits, and 2 million liters of mescal. These figures represent increases in the production of all these beverages since 1968 with the exception of some common spirits (e.g., rum and more local beverages such as "aguardiente" and "mezcal"), which declined. The increase in brandy production was particulary notable, going from 16 to 87 million liters over the time period (Rosovsky 1981). Unfortunately, data on local production, which is very common in rural settings, are not available.

Table 8 is based on statistics collected in a recent compilation (FFAS and WHO, 1977).

From the same source, it is estimated that the annual per capita consumption is 27.0 liters beer, 0.3 liters wine, and 1.15 liters spirits. In terms of 100 percent ethanol, the relevant figures are 1.4, 0.04, and 1.15 liters, or a total of nearly 2.6 liters. Since about half the population is adult, it can be estimated that the annual consumption of recorded alcoholic

TABLE 8.--Major types and quantities of alcoholic beverages produced, imported, and available in 1,000 liters and by 100 percent ethanol content: Mexico, 1972 (estimates)

Beverage		1,000 liters				As 1,000 liters 100 percent ethanol available
Type	Percent ethanol by volume	Produced	Imported	Exported	Available (a+b-c)	
Wine	12.0	15,000	2,835	262	17,573	2,109
Beer	5.0	1,513,717	11	10,374	1,503,354	75,167
Distilled spirits	45.0	69,594	9,302	9,452	69,444	15,432
Pulque de aguamiel[a]	5.0	322,155	4	21	322,138	16,106

[a]Includes common aguardiente, grape aguardiente, tequila, whisky, mescal, and sotal.

beverages per adult was about 5.2 liters in 1972. This estimate is low compared with most European countries probably because of nonrecorded illicit production and production of pulque. An increasing consumption trend is suggested by revenues from taxation on alcoholic beverages, which increased sevenfold between 1970 and 1979 in spite of rebates given by the State. Another indication of growing supply and demand is the increase in numbers of establishments selling alcoholic beverages, which increased 33 percent between 1968 and 1977. On the other hand, between 1970 and 1975 there was a decline of about 29 percent in the number of establishments producing alcoholic beverages, suggesting a greater concentration of the industry. There was also a 609 percent increase in the value of beer produced over the period 1970 to 1979 as compared to a 174 percent increase in the value of pulque, suggesting the replacement of the more traditional beverage by commercialized beer, although exports of beer also grew considerably during this period, but not as fast as imports. Finally, the price of alcoholic beverages did not rise as rapidly as the price of other foodstuffs (Rosovsky 1981).

Patterns and Consequences of Alcohol Consumption

Few investigations have been carried out in Mexico to determine patterns of alcohol consumption. However, a series of surveys of drug use was conducted in six Mexican cities between 1974 and 1978 and included a section concerning frequency and amount of alcohol intake (Medina-Mora et al. 1974a; Natera 1982; Parra et al. 1975, 1976; Terroba et al. 1978). In each case, a stratified, multistage sample of the population was interviewed, using a questionnaire. The rate of abstainers (no alcohol intake reported for the preceding 12 months) ranged from 35 percent to 64 percent; that of regular drinkers (reported alcohol intake at least once a month) ranged from 21 percent to 37 percent; and that of heavy drinkers (reported drinking daily; more than once a day; or at least twice a month, with five or more drinks on each occasion) ranged from 6 percent to 19 percent. Alcohol use was found to be much less common among women that among men. For example, in the Federal District, the proportion of abstainers was 2 females for 1 male and of regular drinkers was 1 female for 12 males. Considerable variation was found between the cities in the characteristics of the drinkers. In Mexico City, heavy alcohol use was more frequent among the groups aged over 50 years of both high and low socioeconomic status and those of low educational status. Heavy alcohol use was found to be more common among persons born in rural areas.

Some older surveys employed an adaptation of Jellinek's original classification of drinkers for use in Latin America and known as the definitions of Marconi (1967). These cover four categories: abstainers; moderate drinkers; excessive drinkers (Jellinek's alpha and beta types); and pathological drinkers or alcoholics (Jellinek's gamma, delta, and epsilon). One such survey was carried out in the northern part of Mexico City using medical students as interviewers (Cabildo et al. 1969). The sample comprised 550 subjects aged over 15 years of the middle and lower middle classes. The findings were compared to another survey carried out in a rural community in the state of Morelos (Maccoby 1965). Here the data were collected by research workers who had lived in the area for a long time and could verify their observations. A sample of 209 males aged over 15 years was used. For the male urban and rural samples, respectively, the rates found were 29.6 percent and 16.0 percent of abstainers; 46.2 percent and 52.0 percent for moderate drinkers; 12.5 percent and 13.0 percent for excessive drinkers; and 11.7 percent and 14.4 percent for alcoholics. A few other Mexican surveys have attempted to estimate rates of alcoholics. In four studies, only very serious cases were labeled as alcoholics. The rates found per 1,000 inhabitants were 8.5 in a noninstitutionalized population of Mexico City in 1958 (Cabildo et al. 1958); 9.8 in a national sample in 1960 (Mexico Department of Mental Health 1960); 12.3 in a white-collar population in 1967 (Cabildo et al. 1967); and 7.0 in a military population in 1968 (Ayuso et al. 1968). It will be noted that the rates are all very low, no doubt owing to the narrow definition of a case, but despite the different populations and methods of study the rates are fairly similar.

An indirect method of assessing prevalence of alcoholism employs the so-called Jellinek formula based on death rates from liver cirrhosis. Bustamente (1974) adapted the formula to Mexican conditions, taking account of malnutrition, which can increase the incidence of cirrhosis. Using the revised formula, he estimated that among the population aged over 20 years, the alcoholism rate in 1971 was 5.7 percent. Using the original formula, Ibarra et

al. (1973) obtained a relevant rate of 7 percent. The validity of either of these rates is far from certain, partly because certification of cause of death in Mexico is unreliable.

It is surprising that recorded death rates from liver cirrhosis remained fairly constant from 1970 to 1976 with an average of 19 per 100,000 inhabitants (Rosovsky 1981), whereas it would be expected to have risen with increasing alcohol consumption. The rate exceeds those reported by the United States, Italy, and Canada and in Latin America is surpassed only by Chile, Martinique, and Venezuela. In 1970, this cause of death ranked first in the male population aged 40-59 years of age (Mexico, Atlas de Salud 1973). In addition, it increased as a proportion of all deaths between 1970 to 1976 (from 2,431 to 2,690 per 100,000).

Few data are available on other consequences of alcohol consumption, but the following give some indication of data to hand.

The recorded death rate from alcoholism and alcoholic psychosis was estimated as 4.5 per 100,000 inhabitants between 1963 and 1969 (Mexico, Atlas de Salud 1977). Recorded suicide rates in Mexico are low in comparison with the rest of the world, possibly because of religious influences. Spinola de Galvis et al. (1966) estimated a rate of 3.5, and Cabildo (1971), a rate of 2.5 per 100,000 population. In 1967, alcohol consumption was considered to account for 4 percent of suicide cases and for 5 percent in 1977. Some investigators have found high homicide rates (24 per 100,000 population [Velasco Alzaga 1958]; 84 per 100,000 [Bustamente et al. 1974]). On the American continent, comparable rates are found only in Colombia (Rice 1970). The relation to alcohol consumption is unknown. Of traffic accidents reported in Mexico City in 1974, 18 percent were stated to have occurred under the influence of alcohol, an increase from 9 percent in 1970 (Rosovsky 1981). Alcohol was indicated to be involved in 12 percent of sentences for offenses against public order in Mexico City in 1974 and 19 percent in the Republic of Mexico in that year (Rosovsky 1981). It was also reported to be involved in 1 percent of divorces in 1977 (Rosovsky 1981).

National Response to Alcohol-Related Problems

Administrative responsibility. The Mexican Health Code was completely revised between 1973 and 1978, and the 1979 revision establishes that it is a matter of public health to carry out a national campaign against alcoholism, including relevant measures to limit or prohibit alcohol consumption. The Department of Public Health is empowered to carry out a systematic and continuing national program concerning alcohol and the illegal use of narcotics and psychotropic drugs. This should include the following tasks: control of advertising; the development of scientific orientation to the effects of these substances on the health of the individual, the family, and society and their relation to productivity and criminality, especially in educational institutions and work places; continuing education aimed at preventing the use of such substances and encouraging the development of civic, cultural, and sporting activities; and improvement of nutrition.

In order to assist with such work the government set up the Mexican Center for Studies in Drug Dependence. It was found necessary to enlarge the scope of this center, which then became the Mexican Center of Studies in Mental Health (CEMESAM) and in 1980 further expanded to become the Mexican Institute of Psychiatry (IMP). Although Mexican collaboration in the WHO Project on Community Response to Alcohol-Related Problems was initiated in the San Rafael Community Mental Health Center, with the approval and support of the government authorities, the fact that CEMESAM and the IMP took over the responsibility augured well for a broader national involvement in programs on alcohol problems. The very fact of the above-mentioned changes in the health code points in this direction.

Services for treatment and care. Up to recently, national responses to alcohol problems have focused mainly on alcoholism, viewed as an illness and therefore implying a right to treatment. Employees in private institutions have insurance covering medical services through the Mexican Institute of Social Security. Services are provided by general practitioners and designated clinics, general hospitals, and psychiatric departments. Similar services are available for governmental employees through the Institute of Security and Social Services for State Employees. The rest of the population receives care through the services run by the Department of Health and Welfare, including health centers, outpatient clinics,

general and psychiatric hospitals, and community mental health centers, as well as a few rehabilitation centers for alcoholics.

In general, physicians and nurses appear to show little interest in treating alcoholism. Acute cases, with or without psychiatric problems, are usually admitted to a mental hospital for a few days for detoxification and then referred to outpatient services. The patient with a severe psychiatric problem or medical complication may be hospitalized for a longer period. Some follow-up care may be provided through general outpatient departments, but there are no special services for this.

An important source of help is the priests, who are not only spiritual leaders in their communities but also counselors. Often, relying on the devotion of their congregations to the Virgin of Guadaloupe, they can persuade persons with alcohol problems to make a promise to the Virgin (Jura), generally in writing, stating that they will stop drinking for a specified period of time, and generally this promise is carried out.

Voluntary help is provided through Alcoholics Anonymous groups and the Mexican Association of Alcoholics. Two private bodies--the Mexican Antialcoholic Institute and the Antialcoholic Center La Pasca--work without any coordination with official institutions.

Specialized facilities founded by the government also exist in Mexico. These include the Center for Help to the Alcoholic and His Family and the Center for the Prevention of Alcoholism.

Preventive efforts. There appears to have been very little consideration at national level of any need to limit the quantities of alcoholic beverages produced and imported as a possible deterrent to increasing consumption and problems. In fact, the data from which to deduce trends are not easily available.

Production of alcoholic beverages at home is prohibited, but enforcement of the regulations is lax and it is known that such production is considerable in some areas.

Taxation is imposed and supervised by the Treasury Department, and the Department of Commerce establishes sales prices, but there has been no attempt to regulate prices in relation to income as a possible preventive effort (Sanchez 1974).

According to the Health Code, alcoholic beverages can be sold only by authorized establishments, which are not permitted close to schools, places of work, sports facilities, and meeting places for young people. New establishments for the consumption of alcoholic beverages whose alcoholic content is above 5 percent are authorized only in locations considered as tourist centers. Regulations on opening hours depend on the characteristics of the area of the country. Persons under the age of 18 years may not be served in bars, night clubs, or places selling pulque and may not be employed in such places.

In the advertisement and promotion of alcoholic beverages, it is permitted only to give information on the characteristics and quality of the products and techniques of production, with no mention of the effects of the alcoholic content; consumption may not be promoted as being good for health nor may it be associated with sports, or with family or working life. Advertising of alcoholic beverages may not use or be directed at children or adolescents.

There is no legislation in Mexico related to the determination of alcohol concentration in the blood. However, a person involved in a traffic accident is medically examined to determine whether he or she was under the effect of alcohol. A person found driving while drunk can be imprisoned for up to 36 hours; if the offense is repeated within a year, the penalty is suspension of driver's license for 6 months. Consumption of alcoholic beverages is prohibited for railway workers during working hours; the same holds for public transport workers (also for 12 hours before working) and air crews (also for 24 hours before working).

Although the above measures are potentially of value for preventing undesirable consequences of alcohol consumption, it is not known how far they are enforced.

As for education efforts, there are no organized national programs for education on alcohol problems in the schools. Only very limited information on these matters is provided in the curricula for training in mental health, medicine, psychology, nursing, and social work and almost none for training in sociology, anthropology, and other social sciences. There are some documentation centers on medical problems that have information available on alcohol problems, and the Mexican Institute of Psychiatry documents relevant national and international material. Small sporadic public information campaigns have been organized, and one day was devoted to alcohol problems during a National Mental Health week in 1962 in which the mass media were heavily utilized.

Research. The Mexican Institute of Psychiatry is expanding the interest of the former CEMESAM in research on alcohol problems, which originally focused particularly on epidemiological studies. Increasingly it has become engaged in a broader type of research and action involved in carrying out the project on community response to alcohol-related problems.

Some clinical research on alcoholism and alcoholic psychosis and on combined use of alcohol and other drugs is carried out in psychiatric hospitals.

In the National Institute of Nutrition, studies have been made of the relation between heavy alcohol consumption, nutrition, and liver cirrhosis. Animal studies on the effects of alcohol are carried out in the Brain Research Institute of the National Institute of Neurology and Neurosurgery.

Communities Selected for Study

Tlalpan

The area selected for general study in Mexico was the Delegacion of Tlalpan (a "delegacion" [delegation] being a local area under the governmental authority of a delegate). It lies in the southern part of the Valley of Mexico, about 20 km from Mexico City. Apart from a stony plain in the north and the mountainous region and volcanic lava in the south, Tlalpan covers the most fertile part of the valley. Lying at an altitude of over 2,000 m, it has a moderate climate. Within its area of 312 km^2 are the town of Tlalpan proper and several smaller urban areas and villages. At the ninth General Population Census in 1970, the population numbered close to 130,000, but it has been increasing more rapidly than in the rest of the country since the fertile land and growing industrial activities attract substantial groups from neighboring areas. In 1970, 58 percent of the population was aged under 20 years and 4.8 percent over 60 years, which was similar to the general distribution in Mexico. The economically active population numbered about 40,000 in 1976, of which about 11.5 percent were agricultural and livestock workers, 28.4 percent in industry, and 23.4 percent in various services. Large differences in economic status are found, with low-income families in the rural areas, groups with precarious conditions of life in the marginal areas, and a very-high-income group in the center of the town of Tlalpan. The proportion of the population that is illiterate is lower than for the general population of Mexico.

As for health aspects, the main causes of death in Tlalpan are the same as for the rest of the country, respiratory and digestive disorders accounting for a mortality of 115 and 82 per 100,000 population respectively in 1973, and cirrhosis of the liver taking third place with 44 per 100,000. This may be due to the fact that the National Institute of Nutritional Disorders is in the area, and it takes patients with liver disorders from various parts of the country.

In 1976, the delegation had a general hospital and six specialized hospitals with about 2,103 beds, 3 health centers, and 12 outpatient clinics. These institutions were staffed by more than 700 physicians and about the same number of nurses and auxiliaries. The most important medical research institutes of the country are to be found in Tlalpan.

Urban Community

Because of the preponderance of high income families and the high level of provision of services of various types in the town of Tlalpan, a smaller urban area, less unrepresentative of small towns in Mexico, was selected for more intensive study.

The community chosen covers an area of about 170 hectares, formerly part of the common lands of Tlalpan which started to be populated in 1943. By 1970 the population numbered 16,414, the economic levels being low and medium.

The authorities of the district include a president, a deputy, and a secretary for social welfare. There is also a vigilance council.

About 26 percent of the population is economically active, their main occupations being in industry (48 percent) and services (43 percent), only a small proportion (less than 3 percent) being engaged in agriculture and rearing of livestock. The community has a few small factories employing up to 100 workers and making plastic products, aluminum articles, cement, and chocolate; and also has a timber yard. Many work in a neighboring district in four factories that make cellulose, paper, textiles, and woolen yarn and employ 100-500 workers. The housing varies from shacks made of asbestos sheets to stone houses with concrete roofs. There are churches and a small police station.

As well as a permanent market and three movable markets, there is a variety of shops (all supervised as to hygiene by the Department of Health and Welfare), including 21 general stores, most of which sell beer, and two licensed taverns.

The town is supplied with electricity, public lighting, drinking water, and drainage. Bus and collective taxi services are available as well as mail and telephone facilities. There are a football field and a basketball court.

Education is provided free of cost in kindergarten, primary, and secondary schools for 3,900 children, and private schools serve another 1,100.

There are five medical outpatient departments in the town, as well as a clinic of the Mexican Institute of Social Security and another run by the Institute of Security and Social Services of State Workers. Nearby there is a health center and a general hospital, and the health services of the town of Tlalpan are also available to the population of the urban community.

Of particular interest is the Community Development Center established in 1973 as part of the National System of Integrated Development of the Family. It provides preventive medical activities and medical consultations for the community, through a doctor and a nurse; educational and vocational guidance and training through workshops; a center for child development (creche); a kindergarten and a secondary school; a library; a primary literacy course; training in nutrition and in developing kitchen gardens; and a controlled-price shop, laundry, and public baths. The system also organizes sports and cultural activities. The staff of 38 collaborates in the development of a monthly program of activities, and the National System authorities provide advice and assistance from the central office. The Center's coordinator has weekly meetings with neighboring committees and promotes their participation in activities of benefit to the community.

Rural Community

The village selected is in the southern hilly and mountainous part of Tlalpan, on the way from Mexico City to Cuernavaca. It covers an area of about 52 km^2. This village has been inhabitated since 1517 by a few families of the Acolhua tribe, but at the end of the Spanish Conquest, in 1521, its population was increased by other tribes fleeing from the invaders. Politically, the village is headed by the Subdelegate appointed by the Delegate of Tlalpan. The Subdelegate's functions are to advise and help solve various problems, to supervise the proper functioning of public services in the community, and to give notification of any lack of services. Among the organized groups are a common land commission and an improvement committee, concerned with improvement of public services, social activities,

and sports. The village had a population of 5,198 in 1970, about 26 percent being economically active. Most of the working population are engaged in agriculture (57 percent), with smaller proportions in industry (16 percent) and services (21 percent). Most of the population are Roman Catholic and attend the village church, but recently two evangelical churches have been established.

The village is linked to Mexico City by bus services. There is a post office and mail is distributed to the houses, but there is only one telephone, located in the Subdelegate's office. In the main street of the village there are a few public lamp posts. Water is distributed through public hydrants, and there is a very limited and defective drainage system. There are a cinema and a football field.

The village has a market and a slaughterhouse as well as a variety of workshops and stores, including 21 selling clothes, food, and generally beer; a few also sell distilled beverages. There are two shops licensed to sell pulque and various places where alcoholic beverages are sold illegally.

Free education is available for more than 2,000 children in a kindergarten, two primary schools, and a secondary school. The village has a technical school for agriculture and livestock rearing, which trains and advises farmers.

There is a regional hospital for the community, established in 1970 as a general hospital providing free care, but it has recently been turned into an emergency hospital for traffic accidents, since it is located on one of the main roads of Mexico. The village has a medical clinic and a pharmacy.

Alcohol Use, Alcohol Problems, and Responses in the Community

Drinking Patterns and Problems

No special information has been compiled on the availability and consumption of alcoholic beverages in the area of Tlalpan. However, it can be estimated from general information in the country that beer (4-6 percent ethanol) and spirits are the preferred beverages, followed by pulque, with a higher proportion of pulque consumed in the rural areas. As for spirits, those most usually consumed are tequila, rum, and brandy (40-50 percent ethanol), probably because of their low cost. Grape wines (10 percent ethanol) and gin and vodka (40-50 percent ethanol), all produced nationally, are preferred by the upper-middle class.

An important problem, among persons of lower economic level, is the preparation of beverages by the consumer, using medicinal alcohol (96 percent ethanol), which is bought in the pharmacies and not always of good quality; it is mixed with infusions of lemon leaves, orange leaves or others, or with carbonated soft drinks (ocoxochitl).

There are no breweries or distilleries in the Tlalpan area, and all beverages are obtained direct from the distributors in the City of Mexico and brought by truck to the local supply centers. In general, it is considered that consumption of alcoholic beverages, as in the rest of the country, has increased in recent years.

From information obtained direct from the community before this study was carried out, through groups of nurses and social workers, as well as from scientific studies carried out, it is known that in Mexico--and Tlalpan is no exception--alcohol is consumed by all social classes, much more frequently by men than by women, in a proportion of 10 to 1. The age at which drinking is most frequent is between 25 and 55 years, precisely at the most productive stage of life. In recent years there has been an increase in the number of young people who drink.

The predominant Roman Catholic religion does not tend to bring about a decrease in consumption: on the contrary, during festivities for patron saints in certain villages, large

quantities of alcohol are consumed both by the local population and by adjoining communities who generally come in for the local celebrations.

Some people habitually drink at home alone or in company with their family. Others prefer taverns, pulquerias, and other places licensed to sell alcoholic beverages. In Tlalpan there are a large number of restaurants specializing in typical Mexican food, which are generally full on the weekends and holidays with people from the community, from the rest of the city, and also foreign tourists, and in these places there is heavy consumption of alcohol.

Although the consumption of beer is prohibited by law in the many small shops authorized only to sell beer, the local people drink it there, and this is generally not punished by the authoritites. There are also "pulquerias," small drinking places that sell only pulque. In general, they admit only men and there is a small window through which drinks can be sold to women and minors to be drunk at home. However, pulque is frequently drunk on the bench outside so that more can be bought.

It is almost impossible to determine the quantities of alcoholic beverages that are sold, and the number of people who buy them. As in the rest of the country, the sale and consumption increase considerably at the end of the year. This is due to the custom of celebrating the nine days before Christmas and the New Year, when the people work very little and dance and sing, but in particular consume great quantities of alcohol. It is at this time of year that there are the highest numbers of traffic accidents, fights, assaults, homicides, etc.--no doubt because of the increase in consumption of alcohol.

It is considered that the medical problem of liver cirrhosis is important in the delegation, and the staff in charge of the outpatient clinics of the hospitals in the area report that cases of liver cirrhosis are frequent. In 1973, it was the third principal cause of death in the delegation, and in the 45 to 65-year-old age group, it was the first cause of death with a rate of 295.4 per 100,000 inhabitants. As has already been mentioned, this could be partly explained by the special attention given to this type of patient in the National Institute of Nutrition. Pancreatitis, gastric disorders, and other types of medical complication are reported in all the hospitals of the area.

There have been no local studies relating excessive consumption of alcohol and traffic accidents. As in the rest of the country, the possibility of alcohol intoxication is estimated through breath tests and other medical symptoms of drunkenness, and blood-alcohol tests are not made.

As for the problems at work caused by excessive drinking, it is thought that they are important, but up to now there has been no study to determine their magnitude.

Structure for Community Response

Although there have been no earlier studies on response to alcohol-related problems in the communities, there is a general impression that the excessive drinker is rejected. There are few possibilities for providing the help required, and there is practically no coordination between the official and private bodies that try to provide help.

The medical services required are provided through health centers, hospitals, and institutions, of which there are a large number in Tlalpan, although some of them function on a national level. The San Rafael Community Mental Health Center provides preventive and rehabiliation services through its medicopsychiatric, psychological, and social work staffs. In this work, it collaborates with medical, educational, and other facilities serving the population.

The general measures for control of production and sale of alcoholic beverages are the same as for the whole country.

CARRYING OUT THE STUDIES IN MEXICO: MAIN FINDINGS

The way the research was carried out in Mexico, and the findings, are summarized in detail in annex 39 of the international report on the first phase of the project (Rootman and Moser 1983). In addition, a complete description is contained in the final report on the Mexican project (Calderon et al. 1981). This section summarizes the highlights of the Mexican research.

Research Methods

As was the case in the other two participating countries, the Mexican collaborators generally followed the collectively developed guidelines, making amendments as required. One important amendment was the translation of all of the instruments and guidelines into Spanish. While this posed some problems and caused certain delays, it was accomplished successfully, using techniques of translation and back-translation.

The general population survey was carried out in the rural and urban communities described in the last section between July and September 1978. As was the case in Scotland, males were sampled disproportionately, using a multistage sampling design. In contrast, however, the lower age limit for the sample was 15 years old rather than 17. Altogether, 627 persons were interviewed, 354 in the urban community and 273 in the rural. In the former, 240 respondents were men and 114 were women; in the latter, 163 were men and 110 were women.

Interviews with agents were carried out in early 1979 in eight types of agencies in the Delegation of Tlalpan. Altogether, 76 interviews were conducted with various levels of personnel.

The client studies were carried out in the following five agencies: police station, emergency hospital, general hospital, psychiatric hospital, and church. With the exception of the church, all these agencies are in Mexico City and serve the Delegation of Tlalpan. In the police station, 192 Case Report Forms were administered in April and May 1978. In the emergency and accident department, 167 Case Report Forms and Screening Annexes and 52 Client Interview Forms were administered in February 1979. In the general hospital, in February 1979, 191 Case Report Forms and Screening Annexes and 47 Client Interview Forms were given in both the outpatient and inpatient services of the hospital. In the psychiatric hospital 111 patients were interviewed with the Screening Annexes in March 1979, and of these, 50 were interviewed using the Client Interview Form. In the church, 43 parishioners were interviewed in April and May 1979 using the Case Report Form, and 14 of these completed the Screening Annex. Altogether, 593 Case Report Forms, 483 Screening Annexes, and 149 Client Interview Forms were given in the various institutions studied.

Many difficulties were encountered in carrying out the research in Mexico. One particularly difficult problem was obtaining a sampling frame because of a lack of up-to-date maps, population lists, and names of streets. This was resolved by the project team updating existing maps themselves. Another problem was application of the criterion for selecting people to be interviewed with the Screening Annex. It was found to be impractical to ask staff whether they thought alcohol was involved before administering the Annex. It was therefore decided that the Screening Annex should be automatically administered in the emergency and general hospital along with the Case Report Form. In the psychiatric hospital, only the Screening Annex was given because patients were selected on the basis of a presumed alcohol problem, and in the church study the Screening Annex was applied selectively, since it was not intended to carry out the client interview in that setting. It was also found to be difficult to carry out studies in some of the agencies because of lack of space in which to work, the condition of the clients, the flow of cases, and attitudes of staff and patients.

Other problems and their resolution are described in detail in the country report and annex 39 of the international phase I report (Rootman and Moser 1983; Calderon et al. 1981). The main findings will be presented here, as they are in the preceding chapter, in the following order: drinking patterns, definition of drinking, alcohol-related problems, and community responses to problems.

Drinking and Abstaining

As can be seen in figure 7, the majority of respondents in the Mexican general population sample reported that they had consumed alcohol in the past year (67 percent). Men, however, were much more likely than women to have done so. There was little difference between rural and urban men, but some differences between rural and urban women, with a somewhat higher proportion of urban women reporting that they were drinkers. Women of all ages were more likely than men to report themselves to be abstainers, with little difference between women of different ages in the proportion of abstainers. Middle-aged men, however, were more likely than younger or older men to report themselves to be drinkers. Overall, it appeared as if sex differences were more important than age differences in determining whether or not a person would drink in the Mexican sample.

Frequency of Drinking

The most common response to the question "how often do you have a drink containing alcohol?" among Mexican respondents was "less than once a month, but at least once a year." Only about one-fifth of the men, and fewer than one-tenth of the women in the sample reported drinking once a week or more often. Again, men were more likely than women to report drinking often. However, in contrast to the findings about the proportion of abstainers, older men were most likely to drink frequently. Urban youngsters seemed to drink more often than rural ones, but the opposite appeared to be true for older people.

Quantity Consumed

As can be seen in table 9, one-fifth of male drinkers reported drinking more than 200 ml of absolute alcohol on their last drinking day.

As can also be seen, the difference between rural and urban men is not large but suggests a tendency for urban men to consume less. This difference is much greater if total consumption in the week preceding the interview is considered. It is also greater if

FIGURE 7
Drinking and Abstaining Among Urban and Rural Men and Women (in Mexican general population sample)

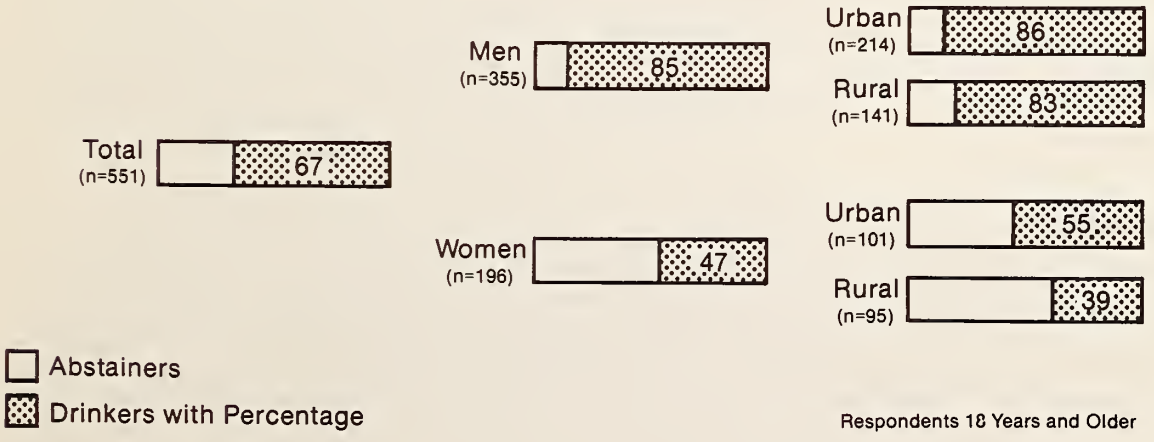

TABLE 9.--Percentages of male drinkers in sample from rural and urban communities in delegation of Tlalpan reporting consuming various quantities of absolute alcohol on last drinking day, by community (respondents aged 15+ years)

	Urban (percent)	Rural (percent)	Total (percent)
Amount in ml of absolute alcohol:			
<100	59	46	51
100-200	25	33	29
>200	16	21	20
Base	(75)	(52)	(127)

consumption on special occasions is included. Once more, women were much less likely than men to report drinking large amounts of alcohol. Young people were also less likely than older to drink frequently and in large amounts. The same was true of respondents with high income, as compared to those with lower income.

Frequency of Drunkenness

Slightly more than two-thirds of the male drinkers (71 percent) in the Mexican sample, and one-quarter of the female drinkers, reported that they had been drunk at least once during the past year. Rural men were more likely than urban men to report drunkenness, which is consistent with the above-noted tendency for the former to report consuming larger amounts. Given the relative infrequency of drinking occasions reported by respondents in the Mexican sample, the rates of drunkenness for men were thought to be impressive and suggested that a great many drinking occasions were occasions for drunkenness as well.

Characteristics of Typical Drinking Occasions

The alcoholic beverage most often consumed on the last drinking day by men was beer, with about half the sample reporting its use. Pulque followed in popularity with slightly more than one-third reporting its use, although about the same proportions reported the use of distilled spirits. About 6 percent indicated that they had consumed 96 percent alcohol. Pulque seemed to be particularly popular in the rural area, and distilled spirits in the urban. Almost half of the men's drinking in both urban and rural areas appeared to take place in a private house. Drinking, however, was unlikely to take place with spouses. It rather tended to involve relations and friends in both rural and urban communities. The tendency for men to report drinking at home increased strongly with age. More than half of the male drinkers reported spending more than an hour drinking on their last drinking day, rural residents being more likely than urban residents to report spending more time on this occupation.

Characteristics of Exceptional Occasions

Occasions on which greatest drinking in the last month occurred tend to be described as "no special occasion," although men were more likely than women to describe such occasions as meetings with friends and women to describe them as family celebrations. The occasion of greatest drinking in the last year tended to be described as a family party or a Christmas party, especially in the urban area. Local festivities were relatively more important in the rural community. Distilled spirits seemed to be a more popular drink on occasions of high consumption than they were on typical occasions of drinking, especially in the urban area. Not surprisingly, such occasions were reported to last longer than typical drinking occasions.

Reasons for Drinking

Table 10 shows the relative importance assigned by Mexican drinkers in the sample to a list of reasons for drinking.

As can be seen, the two reasons most frequently endorsed were "it is what most of my friends do when we get together" and "drinking is a good way of celebrating." "I like the feeling of getting high or drunk" also tended to be a reason endorsed by a fairly large proportion of drinkers, especially males. Although the ranking of the relative importance of reasons tended to be similar for men and women, men generally were more likely than women to feel each of the reasons were important, with the sole exception of "drinking gives me more confidence and makes me sure of myself," where women were slightly more likely than men to consider it to be important. Men were especially more likely than women to stress the importance of celebration, liking the feeling of getting high or drunk, and diet. Differences between rural and urban drinkers were small, although rural residents were somewhat more likely than urban residents to report drinking to forget about their worries and problems and in order to celebrate. Rural women were also somewhat more likely than urban women to agree with the importance of drink when feeling tense and nervous.

Reasons for Not Drinking

The only reason against drinking or being careful about drinking endorsed by fewer than 70 percent of the men and women in the Mexican sample was "it goes against your religion." The most frequently endorsed reasons were costs, the effects on one's health, and interference with jobs or work (all of which were agreed to by more than 90 percent of the men and women in the sample). Although the differences between men and women were once more not substantial, it was considered noteworthy that women were more likely than men to endorse the importance of all of the reasons against drinking with the exception of one (work). Women were especially likely to feel that "drinking can make you feel sick," "you are afraid of becoming an alcoholic," and "it goes against your religion" were important

TABLE 10.--Percentages of drinkers in 1978 general population survey in the delegation of Tlalpan reporting various statements as "very important" or "somewhat important" reasons for their own drinking, by sex (respondents aged 15+ years)

	Males (percent)	Females (percent)
Drinking is a good way to celebrate	51	38
It is what most of my friends do when we get together	47	46
I like the feeling of getting high or drunk	42	30
I drink when I feel tense and nervous	19	16
Drinking helps me to forget about my worries and my problems	19	20
Drinking gives me more confidence and makes me sure of myself	12	15
It is part of a good diet	22	10
I drink because there isn't anything else to do	18	6
Base	(327-331)	(100-101)

reasons against drinking. There were few rural/urban differences in reasons against drinking with the exception of "it goes against your religion" and "you are afraid of becoming an alcoholic," where rural residents tended to be more likely than urban to stress the importance of both these reasons. Marked differences were found between various types of drinkers and reasons against drinking. Both high-quantity alcohol consumers and abstainers gave more importance to reasons against drinking than intermediate drinkers. On the other hand, even among drinkers, all reasons, with the exception of the religious one, received approval from the majority of the sample.

Attitudes Toward Drinking and Drunkenness

The only positively phrased statement in favor of drinking and drunkenness that received majority agreement among men and women in the Mexican sample was "having a drink with someone is a way of being friendly" (agreed to by 60 percent of the men and 57 percent of the women). In contrast, all of the negatively phrased statements regarding drinking and drunkenness received majority agreement from both men and women. In general, men were more likely than women to agree with the positive statements and less likely to agree with negative ones. There were some urban/rural differences in responses to some items, but in some cases these were contradictory. The findings clearly suggest strong agreement among respondents in the Mexican sample regarding the negative aspects of alcohol: drinking brings out the worst in people, it is one of the main causes of people doing things they shouldn't, and drunkenness is both shameful and disgusting, according to most respondents.

Age and Sex Norms

There was considerable variation in the Mexican sample in the extent to which various age/sex categories were permitted to drink or to feel the effects of alcohol. A 40-year-old man was most likely to be granted both privileges and a 16-year-old girl least likely. Men were much more likely than women to be granted both. Permission to get high was much less likely to be granted than permission to drink, for both men and women. One of the most striking findings was a near proscription on getting high for women of all ages. There was also a substantial fall-off in permission to drink and get drunk between the age of 40 and 60 for men. In fact, 60-year-olds were permitted less drinking than their 21-year-old counterparts.

Men were much more likely than women to grant permission to get high and drink, particularly to a young man of about 21 and a man of about 40. Rural/urban differences were not substantial, but it was found that rural residents were more likely than urban to tolerate feeling the effects of alcohol for men of 40 and 60, which would be consistent with their earlier-noted heavier consumption. On the other hand, rural residents were less likely to tolerate drinking for a young woman aged about 21 years, perhaps reflecting more traditional attitudes toward women.

Situational Norms

There was considerable variability in endorsement of drinking and feeling the effects of alcohol in various situations. Both drinking and feeling the effects of alcohol seemed to be tolerated most by respondents at a party or bar or with friends at home. They were tolerated least when driving, during working hours, or as a parent spending time with small children. As was the case with age/sex norms, feeling the effects of alcohol was substantially less tolerated than drinking per se in all situations. The differences between rural and urban respondents were not great, although the urban respondents tended to be somewhat more likely than rural respondents to tolerate drinking when getting together with people at sports or recreational events, and urban women were more likely to tolerate it when getting together with friends after work. The differences perhaps reflect differences in lifestyle of urban and rural residents.

TABLE 11.--Percentages of drinkers in 1978 general population survey in the delegation of Tlalpan reporting experiencing certain troubles related to drinking in the 12 months preceding the interview, by sex (respondents aged 15+ years)

	Males (percent)	Females (percent)
Personal:		
Felt that I should cut down on my drinking or stop altogether	47	14
Have awakened the next day not being able to remember some of the things I had done while drinking	30	7
Sometimes get drunk even when there is an important reason to stay sober	29	4
Have had my hands shake a lot the morning after drinking	27	6
Have been told by a doctor or health worker that the amount I was drinking was having a bad effect on my health	16	3
Have taken a drink first thing when I got up in the morning	12	1
Stayed intoxicated for several days at a time	10	0
Social:		
Felt the effects of alcohol while on the job	30	4
Have been ashamed of something I did while drinking	28	4
Got into a fight because of my drinking	10	1
Been told to leave a place because of my drinking	9	2
Have been involved in a road accident when I have been drinking	1	1
Have been involved in an accident at home when I have been drinking	2	1
Have been involved in an accident at work when I have been drinking	1	0
Base	(350)	(224)

Alcohol-Related Problems

Current Problems in General Populations

As can be seen from table 11, the most commonly reported alcohol-related problem experienced by drinkers in the general population sample in the year preceding the interview was a feeling that they should cut down, followed by amnesia. Among the men, feeling the effects of alcohol on the job, getting drunk when there are reasons to stay sober, and feeling ashamed of something done while drinking were also reported by about a third of the sample.

Men were more likely to respond positively than women on all items; there were particularly large differences on the first four and the items having to do with feeling the effects of alcohol while at work and feeling ashamed of something done while drinking. Rural men were more likely than urban men to report having had most of the experiences with particularly large differences on the first three items and morning shaking of hands. This again would be consistent with the earlier findings regarding differences in drinking between rural and urban communities. The differences between rural and urban females were not substantial and were in no consistent direction.

When the first seven items were put together to form a "current personal consequences score," and the second seven to form a "current social problems score," men were more likely than women to score higher on both. Rural males were also more likely than urban to have higher scores on both, but particularly on the "personal consequences" score. When a regression analysis between these two scores and demographic variables was run, it was found that male sex was the best predictor of high scores in both cases. Education, which was negatively correlated, was the second best predictor. Altogether, 18 percent of the variance in the "personal consequences" score and 14 percent in the "social problems" score were explained by sex, education, age, and marital status.

Lifetime Interpersonal Problems in the General Population

Two-fifths of the men and 6 percent of the women in the sample reported that, at some time during their lives, someone of their family, friends, or acquaintances had said something about their drinking or suggested that they cut down. In addition, among the men, about 7 percent said that their drinking had caused difficulties at work, and about 5 percent reported difficulties with the police involving drinking during their lives. Virtually none of the women reported the latter two experiences during their lives. Thus, as was the case with current problems, men were substantially more likely than women to report lifetime drinking problems. Rural/urban differences were not as substantial as they were for current problems, but somewhat more rural than urban men reported family problems and somewhat more urban men reported work problems. The most frequently reported family problems among men were described as "coming home drunk" (about 60 percent), followed by "spending too much on drink" (32 percent), "being aggressive and fighting" (26 percent), and "embarrassing incidents in public" (20 percent).

Treatment Contact

In the general population sample, 25 persons, all male, reported contact with some form of treatment in connection with their drinking. This amounts to 8 percent of the male drinkers in the sample. Half of these contacts were reported to be with general practitioners. Although this rate is not negligible, in comparison with the rate of problems reported, and the magnitude of informal responses just described, it suggests that the great majority of untoward events with persons having alcohol problems are managed within the framework of informal and nonmedical institutions.

Alcohol Involvement in Agency Contacts

It was reported that alcohol was involved in about two-fifths of the incidents examined in the police station. Those cases involving alcohol were more likely to concern persons in their late twenties, compared with a predominance of the age-group 18-21 years in other cases. The type of incidents where alcohol was involved were more likely to be described as a raid or an investigation for public disorder. Persons in whom alcohol was involved in the case were also more likely to report drinking more frequently, in greater amounts, and a greater variety of alcoholic beverages than the other group.

Table 12 summarizes the extent of alcohol involvement in the events leading to the contact in the emergency hospital, the general hospital, and the church, as assessed by the client and by the staff.

TABLE 12.--Alcohol involvement in incidents leading to contact with agency according to clients and staff by type of agency and sex (respondents aged 15+ years)

	Alcohol said to be involved by client (percent)	Alcohol said to be involved by staff (percent)	Base (N)
Emergency hospital:			
Males	40	27	(114)
Females	10	3	(52-53)
General hospital:			
First admissions:			
Males	32	17	(55)
Females	7	2	(41)
Readmissions:			
Males	30	53	(54)
Church:			
Males	70	80	(20)
Females	26	N/A	(23)

As can be seen, alcohol was reported to be involved in 40 percent of the male cases and 10 percent of the female cases interviewed in the emergency hospital. The estimates given by hospital staff were somewhat lower, which might in part be accounted for by the fact that the patients' assessment included some instances where someone else's drinking was involved (8 percent of the men and 2 percent of the women). Only one of the patients was reported to have been known previously to the hospital as having alcohol-related problems.

In the general hospital, alcohol was reputed by clients to be involved in about one-third of the male first admissions and readmissions. In contrast, it was involved, according to the clients themselves, in only 7 percent of the female first admissions. It is interesting to note that the staff gave lower estimates of alcohol involvement in the case of first admissions and higher in the case of readmissions. It is possible that the latter may be due to the fact that the readmitted patients were known to the hospital for a longer period of time and that the hospital is characterized by well-kept records. Readmitted patients may also be more likely than first admissions to minimize alcohol involvement to avoid embarrassment or admission of failure.

In the church, 70 percent of men reported that drinking was involved in their coming there. Twenty-six percent of the women also reported alcohol involvement, although it was not their own drinking but that of others that brought them there. The priests' estimates of alcohol involvement in the case of the men was higher than that of the men themselves.

As a sweeping generalization, in the samples studied, and irrespective of whether the assessment was made by the individuals themselves or by staff, alcohol was more likely to be imputed in the case of men than women. This is certainly consistent with the above-mentioned findings from the general population survey.

Comparison of Different Samples of Drinkers

Comparing male patients with alcohol-related problems from the emergency hospital, general hospital, and the psychiatric hospital with a sample of heavy drinkers from the general population survey, a number of differences were found. Among the more substantial were the

following: psychiatric hospital patients were most likely to report frequent drinking; to have high consumption, frequent drunkenness, and concentrated drinking of distilled spirits and pulque; and to have experienced problems at work related to drinking during their lives. The admission patients in the general hospital were likely to report having experienced personal and social consequences of drinking during the last year. The emergency hospital sample was least likely to report having current consequences, followed by the population sample, where two of the consequences were not asked about. The general population subsample was least likely to report experiencing police problems associated with alcohol during their lives and most likely to consider various reasons for not drinking as being "very important," at the same time this subsample was most likely to permit drinking and feeling the effects of alcohol in various circumstances. There were also differences in the demographic characteristics of the various samples, emergency hospital patients tending, among other things, to be the youngest, and readmission patients to be the oldest. The drinkers from the general population sample were most likely to report their state of health as good and the readmission patients to report their health as poor.

Community Response

Attitudes Toward Treatment

As can be seen in table 13, most of the respondents in the Mexican sample seemed to regard treatment as an effective enterprise (87 percent of the men and 92 percent of the women). Yet many did not know where to get help for an alcohol problem, and the majority thought that if they had such a problem, or if they looked for help, everybody would soon know about it. At the same time, most would not be ashamed to tell someone about their drinking problem. There seemed, however, to be a lack of confidence in community leaders or the government in their ability to ameliorate alcohol problems and a general feeling that community intervention might not be justified except in some circumstances, such as when a man does not support his family as a result of drink. Women, in particular, agreed with the latter sentiment as well as with the desirability of punishing a man who is always drunk. Rural residents were more likely than urban to indicate that they would be ashamed to tell somebody about their drinking problem, but at the same time less likely to mind if a treatment facility was placed close to their home. They were also more likely than their urban counterparts to favor punishment and to express confidence in the ability of community leaders or the government to ameliorate alcohol problems. Rural men were also more likely than urban to feel that a person's drinking is their own business and rural females seemed to be more likely than urban to know where to get help for a drinking problem, perhaps as a reflection of higher rates of drinking and problems among their menfolk.

Sources of Help

Alcoholics Anonymous was most often suggested by respondents in the general population survey as a source of help, and over four-fifths of the sample recommended it. The next most frequently recommended treatment institution was a medical service, followed by a general practitioner. About two-fifths of the respondents would recommend the church, and about one-fifth, a curandero (native healer). Overall, formal treatment was more acceptable than informal, and women tended to recommend both types more frequently than men. Rural residents were more likely than urban to recommend private physicians, medical services, and healers. Urban residents were more likely than rural to suggest Alcoholics Anonymous, and rural women were more likely than urban to recommend the church.

Response to Public Events

In four hypothetical situations involving alcohol, intervention by the treatment system and by relatives was considered appropriate by almost everybody in each situation. Intervention by bystanders was considered particularly appropriate in a situation where a man falls down on the road as a result of his drinking and where a woman has problems with walking as a result of her drinking. Intervention by the police was considered appropriate by more people when a man hits his wife when drunk and when a man falls down on the street as a

TABLE 13.--Percentages of respondents in 1978 general population survey in the delegation of Tlalpan agreeing with certain statements regarding treatment, by sex (respondents aged 15+ years)

	Males (percent)	Females (percent)
There are treatments that often succeed with people with alcohol problems	87	92
The community leaders or the government can do a lot about alcohol problems	40	39
A man who is always drunk should be punished	54	64
A man's drinking is his own business, and no concern of the community	66	62
If a man drinks and does not support his wife and children, the community should give them help	48	58
If you had a problem with your drinking, you would be ashamed to tell anyone about it	41	50
If you had a drinking problem in this community, everyone would soon know about it	83	90
If you had a problem with your drinking, you would not know where to get help	81	90
You wouldn't want a place where people with alcohol problems get treated to be near where you live	49	50
If you asked for help with a drinking problem in this community, everyone would soon know about it	53	54
Base:		
Minimum	(394)	(216)
Maximum	(400)	(223)

result of his drinking. Even in the former situation, however, intervention by the police was thought to be less appropriate than intervention by treatment agencies and by relatives. Similarly, intervention by authorities, when there is not enough food for the family as a result of a man's drinking, was less likely to be thought appropriate than intervention by relatives or the treatment system. There were no substantial differences between men and women in their views regarding how to deal with these four situations, nor were there substantial rural/urban differences, except that rural respondents were somewhat more likely to consider intervention by bystanders and authorities appropriate in the situation where a man spends so much on drinking that there is not enough food for his family, and rural females were more likely than urban to advocate such intervention where a man drinks so much that he falls down.

Informal Social Response

Almost half of the male drinkers in the Mexican sample reported that someone in their family had said something about their drinking or suggested that they cut down some time during their life, and almost two-fifths reported such an experience in the last year. Much smaller

proportions of women reported such experiences. The source of most of the complaints tended to be spouses, although parents and others, including siblings, other relatives, children, friends, and acquaintances were also frequently mentioned. The dominant reaction to serious alcohol problems tended to be described as an aggressive one.

Most of the women in the sample had been concerned that their spouses were drinking too much at one time or another, about two-fifths had been concerned about their fathers, and a third had been concerned about their teenage children. Men were more likely to be concerned about their fathers and very few were concerned about their spouses. Women were more concerned about excessive drinking by teenage children than men. Rural women were more likely to be concerned about drinking by their loved ones than urban, and rural men were more likely than urban to show concern about drinking among parents. About one-fifth of the male drinkers and only 3 percent of the females reported that they had talked with someone about their drinking behavior at some time. Spouses, relatives, friends, and doctors were the four most popular coconversants, with a substantial minority also talking to a workmate, a work supervisor, or a priest.

Client Experiences

First-admission patients in the general hospital who had alcohol-related problems were consistently more positive in their attitude toward treatment, as compared to other groups of clients and heavy drinkers from the general population. Clients from the emergency hospital were most likely to report the reactions of their families and friends to their more serious alcohol-related problems as an aggressive one. Those from the psychiatric hospital and readmissions from the general hospital were most likely to describe the reaction in terms of concern for health, and those from the psychiatric hospital as well as first admissions to the general hospital were most likely to describe the reactions as emotional in nature.

Agents' Attitudes

Although it is impossible to make a brief summary of the findings of the interviews with staff of agencies, it might be noted that the nature of alcohol-related problems coming to the attention of various agents differed according to the agency. Emergency staff were most likely to report trauma, road accidents, and acute alcoholic conditions. General hospital staff were most likely to report internal medical conditions, and psychiatric hospital staff to report personality disorders, alcoholic conditions, and drug dependence. There was wide variation in the amount of time devoted to dealing with patients having alcohol-related problems, more time being reported in emergency and psychiatric hospitals than in the general hospital or other agencies. Most agents, however, reported that they saw a substantial number of clients with alcohol problems, presenting various kinds of symptoms.

Clients with alcohol problems seen in the psychiatric and general hospitals were often referred by other agencies. Self-referral tended to be more likely in other agency settings. Agents tended to describe clients with alcohol problems as male and of lower socioeconomic status. The description of their ages varied by agency, but in some cases did not correspond to their actual ages as determined by the studies of clients. Some agents noted a recent increase of young clients with alcohol problems.

Although some of the agents interviewed had received training to deal with alcohol problems, most expressed considerable interest in receiving further training. There was some knowledge of alcohol problems among agents but also considerable ignorance. Some felt that they should not deal with alcohol problems because it was not part of their role. However, considerable optimism regarding treatment was expressed. Most agents referred to the lack of time and resources to deal with alcohol problems properly.

IMPROVING COMMUNITY AND NATIONAL RESPONSES IN MEXICO

Problems Posed by Alcohol in Tlalpan

As was done in the preceding chapter, a brief review of the findings about alcohol problems in Tlalpan seems in order before consideration is given to the implications of the project for action. In this regard, it should be noted that even more than was the case in the Lothian region of Scotland, alcohol problems in Tlalpan were conspicuously more common among men than among women. This was true in both the general population sample and in the samples coming to the attention of agencies.

In the general population sample, almost half of the male drinkers interviewed felt that they should cut down on their drinking as reported for the preceding year, and over a quarter reported that they had experienced five other problems associated with drinking during that time period. In marked contrast, only 14 percent of the women felt they should cut down and fewer than 8 percent reported any of the other alcohol-related experiences.

Altogether, 56 percent of the male drinkers compared with only 19 percent of the female drinkers reported experiencing 2 or more of the "personal consequences" of drinking in the last year. Similarly, 42 percent of the men and only 9 percent of the women reported two or more of the "social problems." Thus, as revealed by the general population survey, alcohol-related problems in Tlalpan are predominantly a male experience. They may also be more prevalent in the rural than in the urban areas, as 12 out of the 14 experiences inquired about were more often reported by males in the rural community studied than in the urban. The findings suggesting greater consumption of alcohol among rural men lend additional weight to this finding. On the other hand, however, it should be recalled that the rural community studied may not be "typical" of rural communities and that the questions may mean something different in rural communities than in urban. Thus, care should be exercised in generalizing to other rural and urban communities without further studies.

Among clients of agencies, as noted, alcohol involvement was found in the case of 40 percent of the police contacts, a figure identical with that in Scotland. In addition, alcohol was indicated by male clients to be involved in 40 percent of the cases studied in the emergency hospital, about 30 percent of the cases in the general hospital, and 70 percent in the church. Corresponding assessments by staff were: 27 percent in the emergency hospital; 17 percent among first admissions and 53 percent among readmissions in the general hospital; and 80 percent among the men studied in the church. These figures certainly suggest a significant demand on services resulting from the use of alcohol, even though the figures for women were substantially lower. The high rate of liver cirrhosis deaths (295.4 per 100,000 in 1973) gives additional credence to this assertion although, as already mentioned, it may in part at least be due to the presence of the National Institute of Nutrition in the delegation. Further evidence for this view is the perception of agency staffs that alcohol problems were substantial in their case loads.

As another possible indication of the prevalence of alcohol problems, respondents in the general population survey were asked to comment on the frequency of four hypothetical events involving alcohol. The majority reported that each of these events occurred often. This may, of course, reflect a high level of concern about alcohol problems, noted in other parts of the general population survey, but it is probable that to some degree at least, it reflects the actual situation.

The evidence gathered in this project leads to the conclusion that there is indeed some basis for concern about alcohol problems in Tlalpan and in Mexico as a whole. Attempts to improve responses to such problems at local or national levels therefore seem eminently justifiable.

Themes Suggested by the Research

Sex Differences

One of the most striking themes suggested by the research carried out in Mexico had to do with sex differences. On virtually every dimension studied, clear differences were found between men and women in the sample. Among other things, men were more likely than women to drink more, to stress the value of drinking, and to report more drinking problems. Women were more likely to express more concern about the drinking of their spouses and to be more willing to accept help from the community. Furthermore, there were much stronger norms against drinking and drunkenness among women than among men, drunkenness by women being virtually proscribed.

Alcohol Problems and the Family

The sex differences relate to another theme that emerged clearly from the research, namely, the role of the family in relation to alcohol problems. As reported above, very little of the men's drinking takes place with their spouse alone, most being in the company of male friends and relatives. At the same time, almost half of the male drinking is reported to take place at home. This suggests an image of men bringing male colleagues into the home, perhaps to the distress of the wife, who may be excluded from the drinking but not from the consequences of that drinking. It is thus perhaps not surprising that family problems associated with alcohol were quite frequently mentioned, and considerable concern was expressed by women about the drinking of their spouses and fathers. Moreover, the reaction of the family to the most serious alcohol-related problem was most often described in terms of "aggression." On the other hand, the large proportion who reported talking to spouses and relatives about their alcohol problems suggests the potential of the family in helping to resolve such problems.

Rural/Urban Residence

Perhaps linked to some extent with these first two themes is a third striking theme of rural/urban residence. As noted, rural women were somewhat more likely than urban women to show concern about excessive drinking among spouses, teenage children, and parents. This concern receives some justification from other findings of the research to the effect that rural men reported drinking more alcohol than urban men, got drunk more often, tended to spend more time drinking, were more likely to drink to forget and to celebrate, were more tolerant of drinking and drunkenness, and reported experiencing alcohol-related problems more often. At the same time, the data suggested more liberal attitudes and behavior toward drinking among urban than among rural women. There also were differences in beverage preferences between rural and urban residents, with rural residents being more likely to drink pulque and urban residents to drink spirits. These differences in beverage preference may have implications for the development and expression of alcohol-related problems.

Concentration of Drinking

Another theme had to do with the concentration of drinking. Although drinking seemed to take place relatively infrequently, when it did occur it tended to involve the consumption of relatively large amounts of alcohol. Such a pattern of consumption has obvious implications for the expression of alcohol-related problems, tending to be more productive of acute rather than chronic problems. The finding that drinks of greater alcohol concentration were more popular on days of high consumption might contribute to this type of expression of alcohol-related problems. There is unfortunately no clear indication from the data that such acute problems are more frequent than chronic ones, although the frequent mention of aggression in connection with alcohol and the relatively high involvement of alcohol in police and emergency male admissions was certainly suggestive.

Magnitude of Problems Among Men

In any case, the relative magnitude of alcohol-related problems among men as seen through the various approaches to data collection was an important theme in its own right. In particular, the relatively large portion of male general population respondents reporting that they had experienced the effects of alcohol while at work in the last year was of some concern and perhaps suggests a mode of intervention that may be effective, although different in urban and rural areas. The relatively large proportion of persons experiencing alcohol problems identified through the police and through the church suggests also the need for concern and possible bases for intervention.

Diversity of Problems

Another related theme was the diversity of alcohol-related problems. It was quite apparent from the research that the problems associated with alcohol use are not just medical in nature, although health problems are certainly important. Substantial proportions, in fact, report work and family problems, and a fair proportion report problems with the police. Such a view of alcohol-related problems certainly has important implications for action.

Levels of Concern

The level of concern about alcohol-related problems was another theme worthy of consideration. In this regard, the almost unanimous endorsement of reasons against drinking was notable, as was the finding that almost everybody agreed that the four hypothetical situations involving drinking were serious and happened often. The question of whether or not this represents an excessive level of concern about alcohol-related problems is one that will need to be addressed.

Identification of High-Risk Groups

Another theme that emerged from the findings was the identification of high-risk groups. Middle-aged and younger men in particular emerged as groups deserving special attention, the latter especially in urban communities. There was also some evidence from the research that members of lower socioeconomic groups were at particularly high risk of developing alcohol-related problems, although more evidence on this point would be desirable.

Faith in Treatment

Faith in treatment was another theme that emerged from the findings. As reported earlier, almost the entire sample felt that treatment of alcohol-related problems is often successful. The same was found among all of the samples of drinkers and among the agents who were interviewed. Considerable support was expressed for Alcoholics Anonymous and medical services, as well as the church. In general, formal treatments seemed to obtain more acceptance than informal ones.

Lack of Knowledge About Treatment

At the same time, a considerable lack of knowledge about treatment was shown. In the general population sample, for instance, about half reported that they would not know where to get help with an alcohol-related problem. In addition, in the agency interview, many agents reported that they had not received much training in relation to alcohol-related problems and would appreciate having more. As noted, the descriptions of the patients with alcohol-related problems offered by the agency personnel sometimes did not correspond to the pictures derived from the study of the clients themselves, and agents very often did not recognize drinking problems in their own patients. They did not recognize how far the treatment of these problems was a part of their responsibility and frequently considered that they had no obligation to respond to such problems, even when alcohol problems appeared to be one of the reasons why patients were seeking help. Moreover, agents were

often unaware of referral procedures. All this seemed to be related to an inability on the part of many agents to assume a therapeutic role toward drinking problems. They manifested attitudes of insecurity and inadequacy because of lack of information and the necessary skills for responding to such problems.

Stigma Associated with Alcohol Problems

The stigma associated with alcohol-related problems was another theme, perhaps related to the theme of concern, although there seemed to be less stigma attached to alcohol problems than concern, at least within the general population sample. Nevertheless, substantial minorities reported that they would be ashamed of having a relative with an alcohol-related problem, and of telling anyone about their drinking problems, and that they would not want a place where people with alcohol problems get treated to be near where they live. Similarly, in the emergency hospital at least, about one-quarter of the agents interviewed indicated some rejection of patients with alcohol-related problems.

Commercialization of Alcohol Production and Distribution

Finally, although not dealt with exhaustively, the theme of commercialization of alcohol production and distribution emerged. As noted, respondents in the rural area were more likely to consime pulque than those in the urban area. There was also some evidence obtained from other sources suggesting increasing availability of commercially produced beverages having higher alcohol content. The implications of this development need to be more fully documented, explored, and considered.

Implications of the Mexican Project for Action

These themes and other information obtained during the course of the project suggested a number of implications for improving responses to alcohol-related problems at local and national levels in Mexico. The following represents a summary of some of the main implications.

Implications for Improving the Local Response

At the very least, the magnitude and diversity of alcohol-related problems in the communities studied, as shown through the various sources of information, suggested the need for consideration and development of means within the communities for improving responses to such problems. The project also had a number of implications for specific actions that might be fruitful at a local level.

For example, the theme of the role of the family implies the need to develop programs to assist families in coping with alcohol-related problems. The research further suggested the desirability within these programs of giving special attention to women as well as to interpersonal communication between spouses. It may also be feasible to attempt to develop means of minimizing the friction caused by husbands bringing their friends home to drink, perhaps by promoting leisure activities with greater participation of both sexes.

Another specific implication of the project derived from the view that it gives of drinking practices. As noted above, drinking in the communities tends to be relatively concentrated on particular occasions, promoting drunkenness and aggressive behavior. Perhaps means can be developed for reducing the amounts consumed on such occasions, possibly by attempting to make drunkenness socially undesirable, thereby encouraging people to consume moderately.

A further specific implication had to do with the focus on high-risk groups. As noted above, middle-aged and younger men emerged as groups deserving special attention, as did lower socioeconomic status groups. Middle-aged men in rural communities also emerged as a particularly high-risk group, as did younger men in urban environments. Thus programs might be designed to deal specifically with these and other high-risk groups.

The research also indentified some possibly useful points of early intervention. In particular, it suggested that the work place, the police, and the church might be particulary useful agencies for such efforts. The recent seemingly effective programs for the work place such as that being developed in some Mexican companies might be developed in other companies and industries as well. The police and priests might be informed about other resources in the community for dealing with alcohol-related problems and encouraged to use them more often.

The research suggested that general medical service agencies have potential to approach treatment of alcohol problems since physiological consequences of drinking were expressed frequently and people showed confidence in these types of agencies. However, the research also made it clear that it is necessary to train staff in order to reinforce their participation, and to achieve a more effective response oriented toward the community.

On the other hand, the study also highlighted the need to view alcohol-related problems as more than just medical in nature. This implies the need to work with a broad range of institutions in the community such as those noted above. It also implies the need for educational and informational programs in the communities, aimed at improving knowledge about and attitudes toward alcohol problems.

In involving community institutions productively, it is obvious that some coordination mechanisms are required. During a visit to Tlalpan before the project started, discussions with the Delegate revealed that he had frequent discussions with a kind of "coordinating group" of persons from a variety of agencies in the delegation. The Delegate in position at that time was very much interested in alcohol problems and willing to consider possibilities of action. This matter could well be followed up with the present Delegate, in the hope that a group under his leadership might serve as a focus for a community response to alcohol-related problems within the larger community of Tlalpan.

Within the urban community, a focus for community response might well be the Community Development Center and, within the rural community studied, a similar focus might be the Subdelegate together with the Improvement Committee. Members of these bodies might be involved in further discussions at both local and national levels.

Implications for Improving the National Response

Many of the above-mentioned implications for improving local response also apply at national level. However, the project has some implications that apply uniquely at the national level.

Specifically, as noted in the introduction to this chapter, the Mexican Health Code, 1979 revision, establishes that it is a matter of public health to carry out a national campaign against alcohol problems. The Ministry of Health is empowered to carry out a systematic and continuing national program, including a number of specific tasks mentioned in the introduction.

The implications of the above include the following types of action:

- development of a coordinating mechanism at national level, possibly under the aegis of the Ministry of Health, to ensure the involvement of a variety of government departments, social security bodies, voluntary bodies, and professionals from the range of disciplines in the development of national policies and programs concerning alcohol problems: in fact, such a body, called the National Anti-Alcohol Council, was recently established by the President of Mexico;

- much wider information and continuous monitoring of data on alcohol availability, drinking patterns, and consequences of alcohol consumption as a basis on which to establish the program: the documentation and research findings from the Community Response Project should serve as a valuable starting point and the Mexican Institute of Psychiatry might continue to play an important role in this work;

- review, in collaboration with the Ministry of Commerce and Industry, of possibilities of price regulation through taxation to prevent lowering of the cost of alcoholic beverages

in relation to average income, since this is considered a useful means of preventing increases in consumption;

- increased effort concerning public and school education on alcohol problems and relevant training as part of a variety of professional curricula: collaboration with WHO and UNESCO in these matters could be valuable, as well as direct exchange of information with other Latin American countries that have embarked on such programs (e.g. Costa Rica, Chile);
- further consideration of the role of alcohol in traffic accidents, and possible preventive measures;
- consideration of means of enforcing existing regulations designed to prevent or reduce alcohol problems;
- review of existing provisions for the treatment and care of persons with severe alcohol problems (alcohol dependence syndrome) in the light of recent implications that protracted institutional care may not be any more effective than brief outpatient counseling; and
- review of provisions for reducing problems in families that appear to result from heavy drinking by one or more family members.

Implications for Research

A number of implications for further analysis of existing data for future research were identified.

It was suggested that the existing data be more intensively analyzed in relation to variables that were not considered because of lack of time and access to computer facilities. In particular, examination of the impact of such variables as socioeconomic status on drinking practices and problems might be undertaken. In addition, it would be desirable to examine more closely the relationship between the various major domains that were studied, especially the relationship between consumption patterns and problems. Further study of the reliability and the validity of the data was also considered to be desirable.

With regard to future studies, the following were among those suggested:

- a study of the impact of commercialization of alcoholic beverage production and distribution on alcohol consumption and problems;
- a more intensive study of the role of the family in coping with alcohol-related problems;
- a study of the relationship between alcohol use and aggression with a view to developing alternative means of coping with such problems;
- a study of the relationship between alcohol-related problems and other types of problems such as nutritional ones;
- a study of how alcohol problems are manifested and dealt with in the work place;
- a study of the practices of staff of various agencies in relation to alcohol-related problems, perhaps using observational techniques;
- replication of the community response project in other communities, particularly those thought to have a high incidence and prevalence of alcohol-related problems with possibilities for action; and
- studies to assess the effectiveness of various intervention approaches to deal with alcohol-related problems.

Action Taken to Improve Responses to Alcohol-Related Problems in Mexico

As in Scotland and Zambia, the Mexican team initiated a number of actions at local and national levels based on the project to try to improve responses to alcohol-related problems. In addition, they monitored these actions by maintaining descriptions of programs introduced, by keeping a log of activities, by conducting interviews and administering questionnaires, and by recording observations.

Action at the Local Level

During the first phase of the project, the team contacted Delegates, Subdelegates, and other officials in Tlalpan and in many of the communities of which it is composed, including the study communities. In addition, contact was made with health personnel, priests, community centers, Alcoholics Anonymous, and other groups within the communities. A number of presentations about the project were made to individuals and groups.

The project team also developed and implemented pilot intervention programs in five Tlalpan communities similar to those studied. To avoid contamination of future work, the two study communities were not included. The San Rafael Mental Health Center initiated the programs by forming local teams, consisting of clinic personnel, local leaders, members of Alcoholics Anonymous and similar groups, and interested community members, including some who formerly had drinking problems. The teams met every 2 weeks to plan a number of activities and programs that could serve as alternatives to drinking. The activities included workshops (e.g. carpentry), courses (e.g. first aid), sports and other recreational programs, lectures, conferences, and sociodramas. They were held in many different locations and at a variety of times during the week. Although not systematically evaluated, it was felt by staff of the Mental Health Center that the community support was substantial, and that the programs were well received and resulted in a much more open discussion of alcohol problems and their possible resolution than previously.

The second phase of the project took place primarily in one of the communities studied during the first phase. The activities in this community were divided into two stages.

The team identified the following objectives for the first stage:

- to improve knowledge about the consumption of alcoholic drinks in relation to their effects, attitudes related to drinking, and the community responses to drinking;
- to promote decisionmaking on the consumption of alcohol, based on better information;
- to make known the services the community can offer in relation to drink-related problems;
- to identify and organize a group or help in the formation of such a group, composed of different community members, who would be interested in circulating the information received and promoting the orientation and completion of concrete activities related to the consumption of alcohol;
- to further the development of an effective help network among the agencies (formal and informal), agents, and clients, that can deal with the drink-related problems that present themselves in the community.

The objectives for the second stage which built on the first as well as the work carried out in phase 1 of the project were:

- to use the already existing infrastructure in the zone to structure an organized group which would promote health;
- to promote an awareness of the characteristics of alcohol consumption and its associated problems by means of feedback programs, based on the results of phase 1, and conferences aimed at different groups within the chosen area;

- to establish the general lines for a prevention program (based on the information obtained and the necessities and interests shown by the different groups in that chosen community);

- to structure the outlines of an educational program in accordance with the interests of the community and characteristics of the problem in the area and with a public health approach.

The first stage was carried out according to the following steps:

- community induction aimed at establishing a relationship of trust between the researchers and community members in order to obtain more precise information;

- identification of a group to receive feedback from the first phase of the project and to form a focal point for further community action;

- organization of discussion groups to promote exchange of information and views;

- monitoring and evaluation using semistructured interviews and participant observations in order to assess the impact of the program.

In carrying out the first step, a psychologist, two school guidance officers, doctors, teachers, social workers, nurses, fathers, chemists, and a priest were invited to participate in the feedback program. Although they were interested, they did not attend the sessions. Greatest interest in the community was expressed by the Center for the Integral Development of the Family. It was therefore decided by the team to use the Center, consisting of a series of women's groups, for the feedback program. The meetings took place in the Center and the participants were members of the women's groups, social workers, doctors, teachers, and the coordinator of the Center.

Five consecutive sessions of an hour and a half were held. Subjects discussed in the sessions included: the alcohol consumption indices in the area; consumption patterns, motives, and reasons; and problems and situations related to the consumption of alcohol in the community. The participants were divided into two subgroups that were led by members of the project team. The groups were combined at the end and presented with findings from the phase 1 study pertinent to that session.

The discussions raised a series of questions including:

- the need for training to offer greater information as to how to approach the drinking problem;

- the absence of formal institutions and private doctors in the community who would treat people with drinking problems;

- concern over the availability of places where it is possible to drink within the community;

- the need to make community members aware of drink problems.

The following alternatives were suggested for responding to these questions:

- organize talks, conferences, and discussion groups by people with training about alcohol problems;

- promote the training of the area's medical personnel in institutions that could offer such training;

- encourage the control of clandestine places where alcoholic drinks can be consumed;

- hold talks, socials, and cultural and recreation events by means of which information about the alcohol consumption and problems can be transmitted and which permit greater family and community integration.

It was suggested that the latter events could take place with the help of the Center for the Integral Development of the Family and AA and Al-Anon groups.

It was also proposed to form an "organizing committee" that could attempt to implement "preventive" activities.

In the second stage, such a committee, consisting mainly of participants in the first-stage sessions, was established. In addition, a number of smaller groups made up of community members and specialists were established. These groups were drawn from the Federal Secondary School, the Center for the Integral Development of the Family, and the local Community Health Center, all institutions in the community. Student groups and one group of mothers were formed from the secondary school, two groups of women were formed from the Center for the Integral Development of the Family, and a group of professionals was formed from the Community Health Center. The two groups at the Center for the Integral Development of the Family were suspended, however, prior to the completion of the program.

As was the case during the first stage, structured interviews were administered to members of the "organizing committee" at the beginning and at the end. In addition, a questionnaire on information regarding the consumption of alcohol and its associated problems was administered to members of the groups, and an inquiry was made into the outlets for alcohol using a semistructured interview. In general, it appeared as if the knowledge of the participants about alcohol problems and sources of help for such problems increased (Rootman 1983, annex 2.1).

The same seemed to be true on the basis of analysis of the responses to the questionnaire in the second stage of the project. In addition, at the end of the second stage, participants in the initial groups formed during that stage verbally committed themselves to carry out a number of action proposals. Specifically, the group of students suggested implementing a program of information dissemination similar to the one to which they were exposed. Similarly, the group of professionals expressed interest in transmitting the information received to groups that they were currently working with and indicated an interest in other subjects related to mental health. Two of the participants in the mothers' group agreed to form another group of mothers to allow the researchers to transmit the information they had received in their sessions.

In addition to work in the chosen community, the National Institute of Psychiatry initiated a number of other activities to implement action plans based on the project. These included discussions with the Director of Psychiatric Services for Mental Health Centers and General Hospitals to consider the possibility of collaboration of the centers closest to the communities studied in the WHO project. Arrangements were made to involve the psychiatric teams of two such health centers and to ensure the collaboration of peripheral medical facilities which give primary medical attention to the populations involved. Contacts were also made with two institutions in Mexico City specializing in alcohol problems, namely the Center for Help to the Alcoholic and His Family and the Center for the Prevention of Alcoholism.

Action at the National Level

At the national level, strong liaison was established with a number of institutions having the potential for developing and executing national programs to prevent and reduce alcohol problems during the first phase of the project. Included were the National Institute of Nutrition, the National Academy of Medicine, the National Association of Nursing Schools, and the National Association of Universities.

At an early stage, a planning group involving two representatives from the National Association of Universities and three from the San Rafael Mental Health Center was formed. Among other things, this group designed and carried out a survey of medical schools in Mexico to determine what they had done and were doing in the alcohol field and to determine their interest in participating in a national program. The group also organized a workshop on alcohol problems at a meeting of the National Association of Nursing Schools. Following this meeting, all nursing schools in Mexico were also sent the National Association of Universities questionnaire.

A meeting entitled "Strategies for the Prevention of Alcohol-Related Problems" was held in Mexico City July 6-10, 1981, to consider the national implications of the project and to introduce it to representatives of other countries in Latin America. Specifically, the meeting was designed to "inform the related authorities about the current situation and impact of alcohol-related problems in the country, to reinforce the important role of governments in the prevention of alcohol-related problems, to illustrate the ways in which prevention may be enforced, to review the experience of other countries, and to gather information about the experience and recommendations of the representatives of the different sectors involved with the final aim to design the principles of a preventive program in Mexico, in accordance with the results of the previous research." (Rootman 1983, annex 2.1, appendix 1)

The meeting brought together representatives of the National Anti-Alcohol Council that had just been appointed by the President of Mexico, and of the various government departments involved, as well as institutions that provide treatment and other assistance for persons with alcohol-related problems. The meeting produced the following recommendations:

(1) to support the recently created National Anti-Alcohol Council;

(2) to create an organization to centralize information;

(3) to give priority to preventive programs and reduce the support given to treatment and rehabilitation programs except those that are inexpensive, highly efficient, or integrated into the care units already in existence;

(4) to take measures to reduce the availability of alcoholic beverages;

(5) to review the existing legislation on alcoholic drinks and enforce the present legislation;

(6) to design educational programs for certain sectors of the population;

(7) to review the legislation concerning publicity on alcoholic beverages and encourage research to determine the influence publicity has on the consumption of alcohol;

(8) to develop educational and preventive programs for subjects in high-risk conditions;

(9) to develop research programs to assess preventive and treatment measures to alcohol-related problems; and

(10) to promote research in order to assess the role played by the trade of alcoholic beverages in relation to alcohol-related problems.

Since the meeting, an attempt has been made to implement these recommendations. For example, relative to the first recommendation, the National Anti-Alcohol Council was provided with the results of the meeting and with other materials that would assist them in their task. Similarly, with respect to the sixth recommendation, information derived from the project has been used to enrich the training programs of the Mexican Institute of Psychiatry and of various professional groups. With regard to recommendation nine, instruments developed during the first phase of the project are currently being used to study populations in the federal district and in different regions of Mexico. Specifically, the following studies were initiated since the completion of the second phase of the project: a general population survey of drinking in eastern Mexico, a school survey in Mexico City, case-control studies in emergency hospitals and police stations in Mexico City, and a case study of families with alcohol problems using questions from the project. The Mexican Institute of Psychiatry has also been collaborating in a WHO project on the marketing of alcoholic beverages, which is consistent with the 10th recommendation. Work is also proceeding on the other recommendations.

ASSESSMENT AND FUTURE DIRECTIONS IN MEXICO

Assessment of the Project in Mexico

Phase I

As mentioned above, the Mexican team encountered a number of difficulties in carrying out the first phase of the project. These included: lack or inaccessibility of existing background information, mainly at the local level; variations in the quality and consistency of existing information; lack of information for developing a sampling frame for the general population survey; translation of the questionnaires into Spanish; lack of trained interviewers and coders; lack of easy access to data processing facilities; sampling problems; and difficulties of access to patients in the hospitals. Nevertheless, they did manage successfully to overcome these hurdles and their experience in so doing as described in their final report (Calderon 1981) and incorporated into the international guidelines (Rootman and Moser 1984) should be invaluable to other Latin American countries that wish to carry out similar projects. It was the general feeling of the collaborators in Mexico that, in spite of the difficulties, it was indeed possible and worthwhile to invest the effort in carrying out the work undertaken during the first phase of the project. Among other things, it produced a body of new knowledge about alcohol problems in Mexico, a cadre of researchers trained to study alcohol problems, and some methods that can be applied elsewhere.

Phase II

On the basis of their experiences in the local communities during the second phase of the project, the community response team in Mexico reached a number of conclusions. On the one hand, the team concluded that the actions they carried out helped to create awareness and knowledge about alcohol-related problems and alternative ways of dealing with them in selected groups in the community. They felt that the type of program they developed was well accepted in the community as it allowed the people in the community to express their views about alcohol problems and to understand these problems better.

On the other hand, the team concluded that certain characteristics of the chosen community were obstacles to the implementation of more comprehensive action to deal with alcohol problems. These obstacles included the absence of an adequate infrastructure for the development of effective programs, the low value given to educational and training programs, the lack of training of agency staff, an attitude of passivity, a lack of communication between institutions and community members, and an inability of institutions to assist people with alcohol problems.

On the basis of their assessment of the project in the community, the team put forward a number of suggestions for the implemention of a local level preventive program. These are presented in the final report (Rootman 1983, annex 2.1). In summary, they suggested that the following points be considered:

(1) that researchers remain in the community for a relatively long time during which they maintain constant contact with community members;

(2) that attempts be made to stimulate reduction of consumption by drinkers, to train significant others in confronting alcohol problems, and to promote alternative activities (cultural and recreational) for people at risk;

(3) that preventive activities be directed to those believed by the community to be more affected by alcohol problems (i.e. the family and the young);

(4) that concrete action be implemented at national level to promote integration of various agencies responsible for alcohol-related problems.

Plans for Further Activities in Mexico

The Mexican team sees the activities that they have carried out to date in the local community as just a first step in a series of actions aimed at the prevention of alcohol problems. The intention is therefore to carry on with the activities that have already been started in the chosen community as well as to carry out similar activities in other communities.

The Mexican Institute of Psychiatry also plans to continue the implementation of the recommendations of the national meeting, to publish a number of reports based on the project, and to make them available to other Spanish-speaking countries.

In general, the authorities in Mexico and the staff of the Mexican Institute of Psychiatry are enthusiastic about the community response project and seem to be quite committed to its further development. It is therefore highly likely that the project will in fact continue to develop in Mexico and that the experience gained will be freely shared with other countries in Latin America embarking on similar enterprises.

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CHAPTER 5

EXPERIENCE, FINDINGS, AND IMPLICATIONS OF THE PROJECT IN ZAMBIA[1]

BACKGROUND

Zambia as an Example of an Independent Developing Country With Limited Resources

Among the developing countries that have attained independence fairly recently, Zambia is not the least well provided, but its economic, technical, and trained personnel resources are at present limited. As recognized by delegates of a number of countries during recent meetings of the World Health Assembly, these resources, as well as the health of the population, and even national development as a whole, may be jeopardized by damaging consequences of alcohol consumption. Such concern has frequently been expressed by the President and Government of the Republic of Zambia, who have pointed to the need for energetic action. However, the planning of effective programs for the prevention, control, and treatment of alcohol problems has been hampered by the lack of adequate information on which to base such plans. A study of the Zambian situation would, it was felt, provide an opportunity for developing and adapting research schedules and methods for use in areas with limited resources and could be expected, therefore, to be of value not only to Zambia but to other African countries and the developing world in general.

Within its area of 752,000 km^2, Zambia had a population of 5.7 million in 1980 (G.R.Z. 1981), compared with 3.5 million in 1963, or an increase of about 43 percent in 12 years. The low density rate of 7 inhabitants per km^2 "compares with an average of 13 for the continent as a whole, although some African countries have densities per 1 km^2 as low as 1, and others as high as several hundreds. Most of the growth rate of 2.5 percent to 3.1 percent per year may have been due mainly to declining mortality, but it is difficult to give an accurate picture since official registration of births and deaths has only recently been established. In 1975, however, the birth rate was estimated at 51.5 per 1,000 population, which was higher than that recorded for any other country in the world, whereas the death rate of 20.3 per 1,000 was below that of more than 40 countries, although somewhat above that for Africa as a whole (19.8). The expectation of life at birth in 1975 was 45.5 years, similar to that for Africa as a whole. In 1980, census figures showed that 49.0 percent of the population were males and nearly half of the population (46.8 percent) were aged under 15 years. Judging by statistics from health institutions, the most common health problems in 1975 were malnutrition, malaria, and respiratory and digestive disorders, and the leading causes of hospital mortality were disorders in newborns and infants, malnutrition and anemias, and pneumonia. Most of the population are of African origin (98.3 percent in 1969), coming from about 70 major tribes in 13 language groups. There are small minorities of Europeans (1.1 percent), Asians (0.2 percent), and Euro-Africans (0.1 percent). In 1975 the adult literacy rate was 43 percent. There are various Christian religious groups, and the indigenous apostolic churches have a considerable following. There is a very small proportion of Moslems in the country.

[1] The material in this chapter is based largely on the final reports of the project prepared by the collaborators in Zambia (Haworth et al. 1981; Kalumba et al. 1982).

The urbanization process is increasing, the 1980 census indicating that 43 percent of the population was living in urban areas (20,000 or more inhabitants), compared with 20.5 percent in 1963 and 35.3 percent in 1974. However, the main occupations are still subsistence-level farming and production and related work (45 percent and 25 percent respectively in 1969), followed by services; sales; clerical and related work (25 percent); and professional, technical, and administrative work (4 percent). The division into various types of occupation is complicated by a large "informal" sector. Zambia is trying to build a classless society in that most of the means of production are owned by the state. Nevertheless, the society is clearly stratified according to income levels. In 1974, in the rural areas two-thirds of households had a monthly income of 30.0 kwacha or less and in three typical urban areas two-thirds of households had a income of 100.00 kwacha or less (K1.00=$1.16) (G.R.Z. 1980).

Zambia is a one-party state with the President of the United National Independence Party as the head of state. The Central Committee of the Party, headed by the Secretary General, is the policy-making body. There is a Prime Minister who is the head of government and, together with five members of the Central Committee, also represents the Central Committee in Parliament. The Party is supreme, and therefore government policy is determined by the Central Committee and made operational by the ministers.

Alcohol Use, Alcohol Problems, and National Responses

Historical

Early descriptions of drinking patterns suggest that drinking was widely practiced in traditional Zambian society and played an important integrative role in social life. It was used for ceremonial purposes on the occasions of birth, marriage, initiation, and death; as an offering to ancestral and other spirits; and for expressing and reinforcing social organization through hospitality, reward for communal labor, tribute to chiefs, and facilitation of the work of courts and councils.

There is no means of ascertaining how often drunkenness occurred, but it was common enough for occasional strong measures to be taken against offenders. The situations in which drinking took place, however, seem to have been under much tighter social control in which the limits of acceptable behavior were probably fairly clearly defined and hence drunkenness would not necessarily be frequently seen as a problem.

Alcohol played a dominant role in the politics of colonialism in Africa (Pan 1975). For centuries it was a prominent item in the exchange of European goods for African slaves and raw materials. As urban centers sprang up along the line of advance of the railway line from south to north, there was an influx of foreign alcoholic beverages destined for the European population. Various arrangements were made to prevent African access to these supplies. Licensing regulations for one area were drafted as early as 1903, and in 1930, the "Native Beer Ordinance," amended from a 1914 proclamation, defined for Africans what and where they could drink and provided local authorities with a monopoly over the brewing and sale of beer to Africans, the beer in question being "opaque beer" whose alcoholic content was not to exceed 4 percent. The ordinance further provided for the establishment of municipal beer halls.

Lusaka's first municipal beer hall, and the only one until 1950, was opened in 1936 at Kabwata or Lusaka New Town, as it was then known (Chansa 1955; Rothman 1978). The net profit from the sale of liquor to Africans was to be used exclusively for the "benefit" of the Africans, defined as "welfare," which was understood to mean recreational facilities. By the 1940s, complaints were registered about the connection of welfare to beer halls and canteens. Africans suggested that profits from beer sales be used to provide better housing and improve conditions in the townships. This proposal was turned down. However, the situation changed when more profits were realized from the expansion of the alcohol trade during the last decade before Independence. For instance, Lusaka municipality expanded its retail outlets and acquired plants to process better quality draft beer at lower costs, and two plants were opened in 1957 and 1958. The results were phenomenal: in the first year alone sales rose by 252 percent (Rothman 1978). Taking advantage of a 1953 policy

directive, Lusaka put all its liquor profits into general revenue, used them to finance its share (50 percent) of the cost of social welfare, and poured the surplus into capital expenditure projects such as road building, street lighting, and supplements to the housing account. Other municipalities lost little time in following the Lusaka example.

Meanwhile, conditions in the municipal beer halls and canteens were not entirely satisfactory. The beer halls were for the most part large, sordid sheds packed with crude wooden benches and tables where customers lined up to buy tickets, then lined up to be handed quarts or gallon tins of locally brewed beer. Sometimes the sexes were segregated when drinking and drinking hours were limited. Men were dissatisfied because in some places the women could get to the canteen early and make large inroads into the supply of beer. Other complaints concerned the quality of the beer. For example, Lusaka's only beer hall until 1950 sold a diluted type of beer. Moreover, the old concrete tanks for fermenting, cooking, storage, and serving produced acids that ate away neighboring walls and exposed brickwork and cement, "whereupon pieces of brickwork and cement would fall into the beer" (Rothman 1978, p.29).

The result was not only considerable resentment and discontent, but also a proliferation of illegal brewing. In a study of drinking practices in Lusaka, Chansa (1955) found that illicit brewing and distilling were carried out on a large scale. Kabwata was considered to be the "social heart" of all the other townships in Lusaka. Beer was prepared late at night by women there and when the gruel was cooking it was common practice to put car tires on the fire to hide the smell of the brew. Holes were dug to hide beer tins and 20-gallon drums. Large 40-gallon drums were carried out to the compound and hidden in the bush. Nevertheless, there was always the danger of detection and arrest by the police. Consequently, drinking was done secretly and beer was sold in the bush. These establishments at which illicit beer was brewed and sold came to be known as shebeens and the women who sold illicit brew were referred to as shebeen queens. Many of these shebeens had, in fact, become institutionalized by this time, and dealing in illicit liquor was a profitable financial undertaking. Police provocation was, in consequence, "viewed as part of a sinister plot which had been engineered to prevent Africans from making a little money" (Rothman 1978, p.33). Chansa (1955) states "forbidding illegal brewing in Lusaka is now a political matter . . . since women feed their own families, pay rents, and supplement their husbands' income on the African beer they brew."

Discontent in the urban areas over beer brewing and drinking regulations erupted into one of Lusaka's largest pre-Independence demonstrations. The request of women to be granted permission to brew African beer was not granted, and to this day brewing and distilling of various types of African alcoholic beverages in urban centers is illegal (distilling, without exception, and some brews are outlawed in the whole country). These illicit brews and distillates--which include some potent brands--constitute a possible public health hazard as the government can neither determine the conditions under which they are made, nor regulate their alcohol content, and deaths from alcohol poisoning following consumption of some of these brands have been reported, but not substantiated.

By the midfifties Africans were allowed to buy European bottled beer and wine, although they were still denied the right to buy European spirits. It was perhaps because of the fact that these beverages had been prohibited them for so long that many people in Zambia and particularly the young saw these beverages as "high class" drinks and drinking them as synonymous with moving to a higher social class. When bottled beer became available it tended to be consumed by those who felt they were on the move "upwards"; yet, there was the constraint of price. On the Copperbelt, for instance, opaque beer would be consumed rather regularly while bottled lager would be taken only around paydays.

From the midfifties, too, an increasing commercialization was apparent, even in the rural areas. While such persons as teachers might drink bottled beers, the women who had formerly brewed their own beer would also sometimes buy opaque beer for sale, while more became available at "taverns"--places used only for the supply of alcohol, something very new in those areas. In the towns, the shebeens continued to flourish but again with a shift from home-brewing to the purchase of beverages for sale.

Zambia, formerly Northern Rhodesia, became a sovereign republic within the Commonwealth on the attainment of independence from Britain on October 24, 1964. Immediately after

Independence all the restrictive and discriminatory measures concerning availability or access to refined alcoholic beverages were removed. Those Africans with sufficient money could now buy whatever spirits they needed without recourse to European acquaintances to purchase for them. However, this change was of less significance than the fact that entry into business was now possible for many people--and one of the most profitable forms of business was seen to be in the sale of beverages; as is described in greater detail below, there was a sudden increase in the number of legally authorized liquor outlets. However, the patterns of drinking established during the colonial period did not change so rapidly and various styles have continued, dependent upon a person's place of residence, position in the social hierarchy, education, and amount of cash available. While "traditional" drinking still takes place in the rural areas, even some ceremonies such as that for a girl's passage to womanhood have now been commercialized. It is now much easier for people in the more accessible rural areas to drink at any time of the year and not only when grain for brewing is available. In the towns, despite the provision of more outlets, shebeens still sell a variety of drinks including some which, unlike traditional brews, are considered to be illicit in all circumstances.

As has been described, the question of "illegal" brewing became a political matter and this has influenced current attitudes toward the shebeens. Strictly speaking, if a person does not have a permit or license he or she may not sell alcoholic beverages. Yet the local (political) party officials allow and may even condone the existence of these particular outlets. There is marked ambivalence toward them at various levels in the party, a fact well appreciated by the women who run these establishments who are not only often in rivalry with each other but who also have to maintain a correct relationship with the local party official. Added onto this pattern of drinking has been the "new" way with an elite who can patronize the large hotels and smart bars of the city centers and who can purchase wines and spirits from the supermarket shelves. And in between remain those who buy bottled beers when they can afford it but who still return to the cheapest drink of all--the commercial opaque beer--when they must.

Availability of Alcoholic Beverages

Beer is by far the most widely consumed alcoholic beverage in Zambia. Lager-type beers are made commercially by Zambia Breweries, which has two breweries and nine depots. Opaque-type beers are produced by National Breweries, with 15 breweries in various parts of the country. National Breweries has no depots because of the nature of their product, which must be consumed within a few days of production; it is usually delivered in tankers to outlets and is never sold in bottled form. Immediately after Independence there was a rise in the production of lager beer and between 1968 and 1974 it rose from 952,000 hl to 997,000 hl. Thereafter there was a leveling off in the rate of production, and between 1975 and 1980 the quantities produced fluctuated between 999,000 and 1,080,000 hl. Importation of beers was negligible by comparison, and in 1979 was only 2,000 hl, for instance. The production of opaque beer has fluctuated between 2,266,000 and 1,696,000 hl per annum, the highest production being reported in 1968 and the production in 1980 being estimated at 1,793,000 hl. No opaque beers are imported. Wines and spirits are imported or the ingredients are imported and blending is done locally. The quantities are negligible in comparison to the amounts of locally produced beer, and it has been calculated that they contribute no more than 0.07 l of pure alcohol to per capita consumption, overall. In 1971, 6,209 hl of wine were imported and in 1977 this had fallen to 2,919 hl. There was a lesser fall, during the same period, in the importation of spirits, from 5,620 to 4,413 hl. (Since 1977 it appears that there may have been a slight rise in the importation of spirits but the figures have still to be confirmed).

As has been mentioned above, home brewing, especially in the rural areas, makes a substantial contribution to the total alcohol production in the country, despite a tendency to turn to the sale of commercially produced beverages. It is impossible, however, to make any realistic estimate of the actual scale of this home production, although people in some more remote or inaccessible areas may have to rely mainly on this for their total alcohol consumption. It can be taken, however, that the estimates of per capita consumption given below are lower than the actual amounts being consumed, possibly by a factor of two.

The distribution of both bottled and opaque beers shows wide variations between different parts of the country. Bottled beer is sent to depots that have been constructed in the major urban centers and, depending upon the state of the roads, it may be distributed to the surrounding rural areas. The amount of opaque beer distributed to the rural areas seems to have varied widely, between only 7 percent of production to about one-third of the total amount produced.

Taking into account the total population of the country, the proportion aged 15 and over, and the amounts of alcohol produced commercially and imported, the apparent per capita consumption of pure alcohol for those aged 15 and over was 4.12 l in 1969, 3.58 l in 1974, and 3.39 l in 1980. These figures obviously do not give a true picture. Since rather more is known of the amounts of various beverages sold in Lusaka, this may be taken as giving a more accurate figure (of consumption of commercially produced beverages): in 1980 this was 8.63 l of pure alcohol. Assuming that most bottled beer is sold within the towns to which it is distributed and that one-third of opaque beer is sent to surrounding rural areas, per capita consumption levels for other urban centers in Zambia in 1980 averages 8.3 l with a range from 5.67 to 10.28 l. These seem more realistic estimates.

It has been mentioned above that the coming of Independence gave an opportunity to entrepreneurs to open many new liquor outlets. In addition, the old-style beer halls were replaced by smaller taverns in the municipal areas. According to official sources of information, between 1972 and 1976 258 new retail liquor licenses and 157 bar licenses were issued in the whole of Zambia. However, these figures must be accepted with great caution for it appears that records and returns to the central authority have not been accurate. It seems that, in many cases, licenses may not be renewed although a person may continue to trade and enforcement procedures have not yet been developed to a high degree of efficiency. But liquor licenses refer only to those places selling bottled beverages (including beer, wines, and spirits) but not (usually) to places selling opaque beer. Permits are issued for the sale of such beer from outlets designated as "taverns" (which may, however, also sell bottled beverages if a license has also been obtained). In the periurban study community, for instance, in 1980 there were 11 bars (9 combined with taverns) and in addition 4 other taverns and 1 bottle store. These serve a community of about 35,000 people who also, of course, may use facilities in the city center where there are 13 hotels and many restaurants, as well as retail outlets (the exact number is not known). This situation may be compared with that in 1960 when Lusaka as a whole (with a population of about 105,000) had 18 bars, including 4 beer halls, and there were 5 hotels and 18 private clubs, but when hardly any Africans would have been found in, or allowed to patronize, any of the hotels or be members of the various clubs.

It is seen that there can be no clear picture of the situation regarding the number of liquor outlets because of the dual licensing system in which enforcement is erratic and records unreliable. This whole system needs review not only because of its inefficiency and complexity but because of inconsistencies within the system--different minimum ages for buying beverages for "traditional beer" (tavern) permits and liquor (bar) licenses although both may apply to the same premises.

Patterns and Consequences of Alcohol Consumption

No systematic surveys of drinking habits in the general population of Zambia had been carried out before this project started. From a study of about 1,000 persons attending health centers in various parts of the country in 1969, Haworth (unpublished) reported that about one-third of the men and two-thirds of the women were abstainers. A survey of drinking among young people was conducted in 10 secondary schools in 1972 (Murphy and Gieske, unpublished) among 1,125 pupils mainly aged 15-19 years (60 percent boys). The responses showed that 64 percent of the boys and 26 percent of the girls were drinkers. In a study done at the University of Zambia in 1971 involving 1,200 students (mean age 22.1 years) it was found that a quarter were abstainers, half the rest being regular and half occasional drinkers. Of the drinkers, 6.9 percent preferred opaque beer, 79 percent lager-type beers, and the remainder (14.1 percent) preferred spirits and wine--a preference distribution that exemplifies a trend from traditional opaque beer to "western" clear beers and spirits.

In a questionnaire study of 168 boys and 168 girls aged 12-21 years in five schools in the Luska region (Haworth and Nyambe 1979), more than half of both sexes responded that they had used alcohol in the previous 3 months. For the boys, the proportions rose from one-third at ages 12-14 to more than four-fifths at age 21, whereas for girls, about three-fifths aged 12-18 years answered positively but, surprisingly, only a third aged 19-20 years and none aged 21 years. Of the total sample, 8.6 percent used alcohol alone at least weekly and one-third used not only alcohol but also cannabis and other drugs.

A further study was conducted of 1,836 students at various institutions, including urban and rural secondary schools, teacher training colleges, a technical college, health training institutions, and the university. The average ages of respondents ranged from 16.3 years for girls at rural secondary schools through 22.4 years for university students to 27.4 for male teacher trainees, and 80 percent of the males and 60 percent of the females reported ever having taken alcohol. Overall, 13 percent of the males and only 2 percent of the females reported drinking more than twice weekly, and 11 percent of the males and 6 percent of the females reported drinking once or twice weekly. There was marked variation between the institutions with men at the teacher training colleges reporting drinking most frequently, followed by men at the university and the technical college. However, the majority did not drink as often as once per week. There was a marked tendency to get drunk when drinking, and 63 percent of those drinking more than once weekly got drunk at least once per week, while 50 percent of those drinking two or three times per month got drunk almost as often. Overall, 67 percent of respondents reported the same frequency of drinking and getting drunk.

As in the previous study reported from the university, some students showed a preference for European-type beverages. Among the men, the university and technical college students resembled each other in showing a strong preference for lager-type beer as a first choice. This contrasted sharply, however, with the teacher training colleges and a health training institution where the men gave opaque beer as their first choice. The boys at the secondary schools were intermediate in this regard. Women and girls at all institutions tended to report a preference for imported beverages, but it appeared that the quantities they actually drank were generally very small. The male teacher trainees and university students drank most on the last drinking occasion and women teacher trainees and trainee nurses the least. Religious affiliation had a considerable influence upon whether a person drank or not but had less influence on those who did drink with regard to frequency of drinking, getting drunk, and the amount taken.

Very little statistical information is available on consequences of alcohol consumption in Zambia. There are no reliable data on mortality from cirrhosis of the liver or alcoholism. Total hospital returns report 400-700 persons diagnosed as suffering from alcoholism on discharge from the hospital or who died in the hospital each year (0.18 percent-0.27 percent of all discharges of patients aged 15 years and over, 1973-79), but probably the majority of such patients never reach health services. In any case, many cases of morbidity related to alcohol are probably not recognized as such and some physicians remain unaware of forms of morbidity seen commonly in Zambia but described as rare in textbooks concerned with practice in industrialized countries.

An indication of the role of alcohol in traffic accidents is given by a study undertaken by the Department of Forensic Medicine at the University Teaching Hospital, Lusaka. Out of 1,740 autopsies performed over 2 years (1974-76), 36 percent were traffic fatalities. Of these, 39 percent were stated to have been under the influence of alcohol at the time of the accident, nearly half of them having a level of more than 1 g ethanol per 1,000 g blood. In 18 cases the level was 2.0 g to 3.0 g ethanol per 1,000 g blood, and in 24, above this level (Zambia, Roads and Road Traffic Board 1979).

However, the police system of recording the contribution of alcohol in road traffic accidents appears to miss many cases, and only 2 percent of accidents are attributed to alcohol. Convictions for driving under the influence of alcohol or drugs averaged 109 per annum during 1970-79, with a tendency for the numbers to fall.

It should be noted, however, that the number of accidents reported per 100 vehicles fell from 9.45 in 1970 to 3.54 in 1979--the actual number of vehicles on the road having

approximately doubled in this period. In the 1960s some cases of "drunk and disorderly" were dealt with in the magistrate's courts and some in courts based upon the traditional system, "local courts." During the last 10 years (1970-79) there has been no rise in the number of cases of "drunk and incapable." According to the police records, 14,968 were reported in 1970 and 19,265 in 1979, but in 1974 the total for that year was 24,817. The majority of offenders were fined but a small number were sent to prison (a higher proportion of young offenders) and a very few, especially juveniles, were caned. The police do not record other cases as being alcohol related although many undoubtedly are so. Okada (1967) reported that, in a study of 3,167 local court cases heard in the Lusaka area (rural and urban) in one year 42 percent of the criminal cases involved alcohol--the charges including affray, assault, unlawful wounding, and causing grievous bodily harm. Hall (1980) reported on a 6-month study of cases of violence dealt with at Lusaka police stations and noted that one-third of robberies took place in bars, and a quarter of assaults took place in bars or bottle stores. There was some indication from the police records that either the complainant or aggressor or both had been drinking in 40 percent of cases of robbery and 30 percent of cases of assault. One-sixth of victims of sexual offenses had been drinking.

Ntsekhe (1972) reports a study undertaken in the mining industry in 1962 in which one large mine, with a total labor force of 35,000, reported that 3 percent of its employees were classified as "problem drinkers." Absenteeism from work, the "end of the month syndrome," is often commented upon in the press, but hard facts are difficult to obtain. It is suspected and frequently stated that wage-earners neglect their families because of spending money on alcohol, but no data relating child malnutrition to alcohol are available. A Food and Agricultural Organization report of 1974 claimed that 16 percent of the consumers' food budget in Zambia was used in the purchase of alcohol, and this figure was the equivalent of what was then ordinarily spent on beef. In another household budget survey, involving 1,300 households in Lusaka, Ndola, and Kitwe, the average proportions of the monthly income spent on alcohol per household in 1974-75 rose from 2.9 percent for the lowest income level to 4.5 percent for the highest level.

National Response to Alcohol-Related Problems

Administrative responsibility. Although alcohol has long been recognized as a major social and public health problem, there is as yet no official or broadly accepted policy for the prevention and management of alcoholism or the alcohol-dependence syndrome or in respect to other alcohol-related problems. However, the United National Independence Party (UNIP) (now the only political party in the country since 1973) has for a long time shown a keen interest in the matter. Consequently, the Party National Council (the chief policymaking body of the Party) made a series of important recommendations to constitute a preventive program for alcohol-related problems. The recommendations included the following: that there should be no increase in the production of beers nor in their alcoholic content; restriction on imported spirits should be tightened; no spirits should be served at State, Central Committee, or ministerial functions; the Party and Government should embark on a vigorous educational campaign against illicit brewing and drinking of alcoholic beverages; a maximum legal limit of 0.5 g ethanol to 1,000 g blood for motor-vehicle drivers should be enforced. Other recommendations included improvement of conditions in drinking places and their location away from main roads, schools, etc.

There has been some evidence of follow-up, such as that no spirits are now served at state functions, press reports on the harmful consequences of alcohol consumption appear periodically, and many campaigns for better driving have been initiated, frequently with a component concerning the effects of alcohol.

The National Council on Alcoholism and Addiction (NCAA) was formed in 1966 to organize a response to alcohol problems. In 1968 the NCAA sponsored the production of a cabinet paper that, if approved, would have enabled a National Commission on Alcoholism and Excessive Drinking to be set up, with powers and duties prescribed by Act of Parliament. The main objectives proposed for the Commission were to facilitate the implementation of Government approved policy in relation to the national Program for the Control of Alcoholism and Excessive Drinking; to collate information regarding alcoholism and excessive drinking in

Zambia and to initiate further research; and to assist in the coordination of training in matters relating to alcoholism and excessive drinking at professional, supervisory and other levels. It was proposed that the membership of the Commission should be at a high level, representing the interests of the various ministries involved with alcohol-related problems, and that there should be an advisory panel of experts from various fields, including law, medicine, sociology, economics, social welfare, community development, and so on.

Unfortunately, although a draft bill was prepared, the paper was not presented to the Cabinet and so no action was taken. By the end of the sixties NCAA came to the conclusion that it could no longer continue its activities without a considerably increased subsidy from government. Since this was not forthcoming, the Council decided to suspend its operations.

Services for treatment and care. There has been a considerable expansion of health services in Zambia in the past two decades. The number of hospitals, for instance, almost doubled between 1964 and 1979 (from 48 to 82) and the number of health centers more than doubled (from 306 to 688). The Mental Health Service is increasingly community-oriented and there is only one psychiatric hospital in the country, all the smaller psychiatric units being attached to general hospitals or to community health facilities. There are no services developed specifically for persons with alcohol problems within the health services.

The lack of health personnel is a serious constraint on the health services, but the situation is improving with the development of schools for nursing personnel (30) of various categories and one for tutors; schools for medical assistants and health assistants; and the medical school, from which 98 doctors graduated between 1973 and 1978. Despite this progress, the medical team density is still low: In 1975 the rate was 80.5 per 100,000 population, compared with 101.2 for Africa as a whole, 349.6 for the world, and 575.7 for Europe. In view of these rates, and the high prevalence of other pressing public health problems, medical teams in Zambia are unlikely to consider long-term treatment of alcohol problems as a priority. Preventive efforts, then, take an even greater significance. The present trend toward preparing health personnel to deliver primary health care should imply their increasing involvement in prevention at community level. Health care is free to all in Zambia, and the 1972 objective of having health institutions within easy reach of every Zambian by the end of the decade is being pursued.

Training is available also in the social sciences at the University of Zambia School of Humanities and Social Sciences, and there is a diploma course for social workers. The social welfare department of the Ministry of Labor and Social Services is concerned with services relating to child and family welfare, juvenile delinquency, school problems, matrimonial problems, public assistance, and problems of the handicapped. Alcohol-related problems are likely to be encountered in many of these fields.

Services aimed at rural development are under the aegis of the Ministry of Rural Development, which runs two schools for rural workers, who could also play an important role in consideration of alcohol problems.

At present, there are no specific services within industry, the penal system, etc., for persons with alcohol-related problems. Alcoholics Anonymous, although it flourished for a time on the Copperbelt, has not really found a place among Zambians.

Preventive efforts. Whether or not as a result of preventive efforts, it does not appear from the statistics that the recorded quantities of alcoholic beverages produced and imported have increased over the last 10 years. On the contrary, imports of spirits, wines, and liqueurs have rapidly declined. The main reason for this may, of course, have been the economic situation rather than the safeguarding of health. Commercial beer production, meanwhile, has remained relatively stable but the supplies have, perhaps, been more widely distributed.

As described above, the number of liquor outlets has increased, although it is extremely difficult to determine exactly how many new licenses and permits have been issued and how many renewed. While originally the Traditional Beer Act permitted local authorities to produce and sell opaque beer, the entire production has been taken over by a commercial organization that distributes its product to a much wider range of outlets. These are still

subject to the regulations imposed by the Act but some of these seem rather to be honored in the breach. This applies in particular to the extent to which opaque beers are sold to be carried away from the premises although this is specifically forbidden: even young children may be found taking away opaque beer in plastic bottles.

The sale of other beverages is controlled by the Liquor Licensing Act, and licenses are granted to a variety of outlets (wholesale concerns, bars, restaurants, and retail--"off-licenses"--who may not sell alcohol for consumption on the premises). There was initially a tendency for shopkeepers to obtain off-licenses and then convert their stores to bars but this aspect of the law seems to have been enforced, although not completely. In fact, enforcement is a major problem and although there are comprehensive regulations on permitted hours of sale, many licensees manage to avoid complying with them.

Importation of lager-type beers from neighboring African states is prohibited but small quantities of other beers may be imported. Excise duty and import sales taxes are levied.

There has apparently been no direct attempt to relate prices to average income. Traditional brews are relatively inexpensive, and there is a standard price for bottled beers at ordinary outlets and imported beverages are extremely expensive. Age limits for purchase and consumption are set but not easily enforced and differ for traditional and European-type beverages. Outlets that have licenses or permits are subject to regulations on hours of sale, but enforcement tends to be erratic.

The Zambian National Council on Alcoholism was successful in persuading the government to ban advertising of alcoholic beverages on radio and television. The council also started a campaign against misleading advertising.

There is no systematic program of education on alcohol problems in the mass media. However, there are occasional articles in newspapers. Elaborate schemes of education and prevention were planned and commenced by the NCAA, including the use of films, news media, and publications. The NCAA has published a booklet, "Shall We Drink," which has been in considerable demand. The National Road Safety Council (which has now become a government department in association with the Office of the Road Traffic Commissioner) initiated many campaigns to improve driving, often with a component on the effects of alcohol. The Ministry of Health has a Health Education Unit, which would be in a good position to organize further relevant work.

No special courses have been arranged at schools yet but some publications of the Health Education Unit of the Ministry of Health and Schools' programs make reference to education on alcohol problems.

During their course in psychiatry (80 hours of lectures and seminars, 9 weeks of full-time clerkship in psychiatry) medical students are given five lectures on alcohol and drug problems. Alcoholism and related topics are dealt with at university courses for students of social work and of sociology and psychology. Students are encouraged to undertake projects concerning alcohol-related problems. This topic is included in nursing education and some courses are provided for general and psychiatric medical assistants, senior police officers, magistrates, and other professional groups.

Communities Selected for Study

In Zambia two contrasting areas within Lusaka, the capital city, were selected for study as well as a rural area, outside the city. The urban areas will be designated in the following description as periurban and surburban communities.

Urban Communities

Lusaka originated in 1905 as a siding on the single-track railway built to serve the new Broken Hill mine (Kabwe), taking its name from Lusaka, the headman of a nearby village. A small agricultural service center developed around the siding and in 1913 a village management board was established; this original site of Lusaka is now the main business district.

The capital was established as such in 1935 and a garden city was planned a mile or so to the east of the existing settlement. High density residential suburbs were established to the south and west, followed by rapid spread of unauthorized compounds. The city covers a vast area relative to its population and further essential low-income housing has developed largely on the periphery where the population faces the worst commuting problems.

Before Independence, almost half the African population of Lusaka lived in the suburbs in houses rented for them from the municipality by their employers. A further 20 percent lived on the premises of their employers and 10 percent in other private employers' compounds. The remainder lived in scattered unauthorized compounds on the periphery.

The population of Lusaka, estimated at 47,793 in 1954, had more than doubled in 9 years (109,300 in 1963) and by about the middle of 1970 was 175,000. In July of that year its area was expanded from 93 km^2 to 360 km^2 with the creation of greater Lusaka, and the population was correspondingly increased. In 1974 it was reported to be 400,000, and in 1980, 538,469.

Periurban community. This community, established in 1957 about 8 km from the city center, was known for many years as a "squatter" compound. In 1975, however, legal authorization was given to the inhabitants for settlement there. Its population grew from 1,100 (1963 census) to an estimated 24,000 in 1974 (sample census) and was given in the 1980 census as 39,498, about 50 percent being children under 15 years of age. A sample census carried out by the Housing Project Unit of Lusaka City Council showed that 41 percent of residents came from the eastern provinces, 16 percent from northern provinces, and the remainder from 6 other provinces and from outside Zambia, about 6 percent having settled before 1961 and 63 percent between 1971 and 1975.

The houses are mostly built by the inhabitants themselves of mud bricks or concrete blocks, but the Lusaka Housing Project Unit is providing assistance in improved building. An upgrading project introduced piped water, improved drainage, refuse collection, and tarred access roads with street lighting. The community is now supplied with government primary schools, a clinic, a welfare hall, a police station, two markets, stores, taverns, and bars.

The political and administrative bodies in the community are the Party Branch Chairman and constituency officials; the Ward Development Committee of the Lusaka City Council; and the police and public health inspectors.

Suburban community. This community comprises three adjacent areas, one being the original high-density housing area for government workers established in 1940. These are mostly brick houses, with no electricity supply; there are public water facilities and external latrines. Ten years later building began in a new area with slightly larger houses and flats that had glass windows rather than wooden shutters. A third medium-density area has only recently been established, the houses having internal water, electricity, and toilet facilities. The combined population of the community was estimated at 27,000 in 1974 (sample census), but the 1980 census gave a much smaller total (11,704) for the older area and 11,934 for the most recently developed "medium density" area. A 1971 sample survey (Haworth, unpublished) showed that about a quarter of the population had lived in the community for up to 5 years, a quarter for 6-10 years, and the rest for longer. The ethnic composition is similar to the periurban community but with more residents from eastern and northern provinces (54 and 23 percent respectively). About 34 percent of the population were under the age of 5 years.

This community has a health center, 5 primary schools, 5 churches (of different denominations), a community development center, a community homecraft center for women, a library, an urban civil court, a police station, 9 bottle stores, 3 council taverns, 3 private taverns, and 19 shebeens.

In 1977 there were three Party branches, with plans to develop four more.

The Community Development Center, run by the City Council, plays a prominent role in the life of this community. Its large welfare hall is used as a cinema and theatre, for both pre-school and adult literacy programs and for training in carpentry and tailoring for school leavers. The urban civil court is housed in the center and there is a volleyball pitch in

the grounds. The center also administers the Housecraft Center, which provides training in household work, nutrition, road safety, and family planning, and organizes groups for discussions on budget management, as well as a variety of clubs.

Rural Community

The rural community selected is part of one of the seven districts of the Central Province. Its area of 5,500 km² is bounded by swamps to the west and lies midway between the cities of Lusaka and Kabwe, about 55 km from each. Its estimated population rose from nearly 30,000 in 1969 to 37,000 in 1980. This gives a density of 6.1 persons per km² and a growth rate of 1.4 percent a year. More than half of the population (51.2 percent) has been estimated to be aged below 15 years, but this figure must be accepted with some caution.

Three main religious groups are active: the Roman Catholic Church, the United Church of Zambia, and the Watchtower sect, the latter being dominant.

The major occupation is commercial or subsistence farming. After the harvest, a proportion of the population of certain villages migrates to urban areas to look for temporary jobs, visit relatives, or settle for longer periods; it is perhaps more accurate to say that these are neither purely rural nor urban residents.

The Lenje are the largest single group in the area but there are some scattered immigrants from Rhodesia and some Tonga groups from the south and Bemba groups from the north. Most of the people are subsistence farmers, but more and more are being motivated to go in for commerce by the large sums of money that maize, cotton, and wheat fetch from the cooperative union centers in the area. Although the majority grow enough food for themselves, many do not have a regular income to meet some of their financial needs. Some, therefore, run small-scale businesses, such as brewing and selling beer; selling sticks of cigarettes at inflated prices; and selling chickens, eggs, fried groundnuts, etc. However, the medium income of respondents in the general population survey was K49 per month--considerably more than the K30 found for rural areas in the 1974-75 household budget surveys (although inflation will have affected this difference). The income is considerably below the income in urban areas--K80 in the periurban area, K203 in the better part of the suburban area.

Within or not far from the community there are 9 elementary schools, one secondary school, 10 community development or agricultural centers, a police station, and 7 rural health centers. However, such centers can serve only people within walking distance, so a Ministry of Health mobile team was introduced into this area in 1975. The area of operation was normally 16 km outside the walking distance from the health center. Before embarking on the treatment, the mobile team leader contacted the area chiefs, village headmen, Village Productivity Committee members, school headmasters, and counselors as well as other village leaders. This was for the purpose of advertising their arrival and securing the cooperation of the people. The team leader on the spot undertook a village survey and community diagnosis to assess the problems of the community.

According to a survey by the mobile team in 1975, covering 21 villages and 26 points of operation, more than 40 percent of the children examined were malnourished. Other health problems included schistosomiasis, diarrhea, anemia, and malaria.

The main authority operating in the area is a Rural Council, which has village productivity committees and ward, district, and provincial development committees. They promote planning and execution of development policies laid down by the Party and the Government of the country.

While the community was atypical of rural communities in Zambia, in the sense that it was the center of a demonstration health project, its choice was advantageous in that it was not too far from Lusaka, which permitted interviewers to stay close by during the study period. It also meant that additional information was available on the community, which was of some help in sampling and other aspects of the project.

Alcohol Use, Alcohol Problems, and Response in the Communities

Drinking Patterns and Problems

Almost no information was available concerning alcohol availability, drinking patterns and responses in the specific communities, although the numbers of outlets mentioned in connection with the urban areas give some indication.

Structure for Community Response

Each of the communities appeared to have some structures through which community responses could be channelled, including development committees working in collaboration with Party branches, churches, schools, health centers, and the mobile health team. In the suburban community, the Community Development Center appears to be a particularly promising focus of effort. In fact it was reported that one of the open monthly group discussions focused on beer drinking and was followed up by an informal survey of the role of alcohol in the local civil cases.

CARRYING OUT THE STUDIES IN ZAMBIA: MAIN FINDINGS

The Zambian research and its findings are presented in detail in the Zambian country report (Haworth et al. 1981), and in annex 40 of the international report on the first phase (Rootman and Moser 1983). As was the case for the other two countries, only some of the highlights will be presented in this chapter.

Research Methods

Many problems were experienced in obtaining background information, especially at the local levels. However, considerable ingenuity was demonstrated in obtaining potential sources of information, which included archives, special university collections, mission records, unpublished material, and discussions with community residents. The richness of the information is reflected in the preceding section of this chapter.

The general population survey was carried out in late 1978 in the chosen suburb and periurban settlement in Lusaka, as well as in the rural community outside of Lusaka. Samples of persons aged 15 and above were drawn, using somewhat different methods in the rural and urban communities. In contrast to Scotland and Mexico, males were not oversampled. Altogether, 1,095 persons were interviewed, 471 male and 624 female; 205 women were interviewed in the periurban community, 223 in the suburban community, and 196 in the rural community; 165, 151, and 155 men were interviewed in the three communities, respectively.

The agent study was carried out in early 1979 in a variety of agencies in the Lusaka area, mostly in the suburban and periurban communities selected for the population survey. Altogether, 51 persons drawn from a variety of agencies and representing a variety of occupational groups were interviewed. Most of the interviews were done on an individual basis, although two group interviews were carried out.

The client studies were carried out in the following five agencies in Zambia: police station, casualty department, health center, psychiatric hospital, and social work office. The police study was carried out at the local police stations in the periurban and suburban communities in October and November 1979. Information was recorded by officers on duty on 254 cases coming to their attention during the study period, 154 in the periurban station and 100 in the suburban station. In the casualty department, data were collected in the accident department of a general hospital in Lusaka from March to September 1979. Altogether, 448 Case Report Forms, 104 Screening Annexes, and 69 Client Report Forms were administered. Clients were interviewed in the health centers or clinics in the periurban and suburban communities and in the small hospital in the rural community which, for purposes of the study, was treated as a large rural health center. The data were collected in the rural clinic in April 1979 and in the urban centers between July and September 1979. Altogether,

524 Case Report Forms, 7 Screening Annexes, and 12 Client Report Forms were given. The study of psychiatric patients was carried out in a psychiatric hospital, as well as in a psychiatric outpatient clinic in a general hospital serving the Lusaka area. The questionnaires were administered during September 1979. The Case Report Form was administered to 90 patients, the Screening Annex to 58, and the Client Interview Form to 43. Interviews were carried out in a social welfare department in September 1979 where 17 Case Report Forms, 2 Screening Annexes, and 5 Client Report Forms were completed. Altogether, 1,333 Client Report Forms were completed, as well as 171 Screening Annexes and 191 Client Interview Forms.

As was expected, numerous difficulties were encountered in carrying out the studies in Zambia. The general population survey proved to be particularly difficult because of the extensive demands on personnel and resources and the logistics of carrying out such a study in a rural area. It proved to be especially difficult to draw samples in the rural area, because of the lack of information needed for establishing a sampling frame. Translation was complicated by the fact that people used as translators were not accustomed to reading their own languages. Although standard procedures of translation and back-translation were used, in retrospect it was thought that it might be preferable to use a standard English version of the questionnaire, train interviewers very carefully in the meanings of the questions, and have interviewers translate on the spot, attempting to convey the intended meaning. Another major problem faced by the Zambian team was computer analysis of the data, which at first had to be done on an insurance company computer for which inadequate documentation on the software was available. A number of untoward events also occurred during the course of the project, including flooding and police and military operations in or near the study communities. In spite of these problems, however, the Zambian collaborators managed to collect and analyze the data and produced enlightening findings about drinking in Zambia.

There were also some problems encountered in carrying out the client studies. For example, the first trial police study was unsuccessful because of a lack of supervision in the police stations chosen. Eventually, however, appropriate supervision by the research team was arranged and the data were collected successfully. In the casualty department, sampling was extremely difficult because patients arrived through various channels each of which had its separate registration procedure, while, at the busiest times, the casualty department's own registration was abandoned. It thus proved to be impossible to work out a way of selecting patients according to any numerical system. In addition, it was necessary to overcome the resistance of medical staff to having what they saw as an extra and irrelevant burden of work put upon their shoulders. Nevertheless, the research team again managed to collect some extremely valuable information from the client studies.

Patterns of Drinking

Drinking and Abstaining

As can be seen in table 14, a clear majority of Zambian females interviewed in the general population survey considered themselves to be lifetime abstainers, and almost half the men did as well.

Furthermore, if abstention is defined in terms of not having had a drink in the last year slightly higher proportions of men and women in the Zambian sample were classified as abstainers. As can be seen, however, there is a clear difference between men and women in the proportion of abstainers, women being considerably more likely than men to fall into this category.

There were also some notable differences between communities and the proportion of abstainers among the men, the suburban community clearly having the largest proportion of self-reported lifetime abstainers (56 percent) and the rural community the smallest proportion (34 percent). In contrast, there were no notable differences between the women in the three communities. It was also found that young men in the rural community were more likely than their counterparts in the two urban communities to report themselves to be drinkers.

TABLE 14.--Proportions of drinkers and lifetime abstainers in Zambian general population sample,[a] by sex and community (respondents aged 15+ years--rounded percentages)

Total sample	Periurban (percent)		Suburban (percent)		Rural (percent)		Total (percent)	
	Male	Female	Male	Female	Male	Female	Male	Female
Drinkers	59	23	44	29	66	30	56	27
Abstainers	41	77	56	71	34	70	44	73
Base (N)	(165)	(205)	(151)	(223)	(155)	(196)	(471)	(624)

[a]Selected from a periurban and a suburban community in Lusaka and a rural community outside Lusaka.

Frequency of Drinking

Among males, those who drank in the rural area reported drinking more often than those in either of the urban areas, especially the suburban community. This was true in spite of the fact that the survey was actually carried out in October when supplies of grain for making home-brewed beer might be expected to be rather low. Once again, women who drank were less likely than their male counterparts to report doing so frequently, although with abstainers removed the differences between men and women were not as great.

A relationship was found between drinking frequency and age in the sample, the age-group 18-29 being less likely than their older counterparts to drink often. This pattern, however, did not hold among males in the rural community, where the oldest age group was least likely to drink frequently. In general, younger people in the rural community were more likely to drink often than their age mates in the other two communities, and the older residents of the rural community tended to report drinking less often than their urban counterparts. Religious affiliation was the only other variable related to frequency of consumption, where those with no religion were most likely to report frequent drinking.

Quantity Consumed

As can be seen in table 15, over one-third of the male drinkers and slightly fewer than one-third of the female drinkers reported having consumed 37 or more units of alcohol on their last drinking day. This is the equivalent of 13 or more locally brewed beers. In all communities, men reported consuming more than women, although the differences between the sexes were not as large as might have been expected. It should be noted, though, that the actual number of women in the samples drinking large amounts of alcohol was not great because of the large number of female abstainers eliminated from the calculations.

Differences between communities were not so striking as noted above, although suburban male and female drinkers were most likely to report consuming the largest amounts of alcohol. Among men, the middle-aged group had the smallest proportion of very heavy drinkers. As for other variables, it was found that Catholics and respondents who had never married were most likely to consume larger amounts.

Frequency of Drunkenness

More than two-thirds (70 percent) of the male drinkers and about half of the females (49 percent) reported getting high once a week or more often. In terms of the total sample, about one-third of the men (31 percent) and one-tenth of the women (11 percent) reported

getting high with this frequency. Thus, again, although males in the Zambian sample were much more likely than females to report getting high frequently, the differences between male and female drinkers were smaller. The same pattern held for self-reported drunkenness. Rural males were more likely than those in the urban communities to report frequent drunkenness.

It was noted that many respondents answered the question on frequency of drinking, frequency of feeling alcohol effects, and frequency of drunkenness in the same way. This suggested that many respondents tended to drink in order to get intoxicated. Altogether about one-quarter of respondents never drank unless they got drunk, and drunkenness was the only effect they had experienced. It is possible, however, that some respondents had difficulty in understanding the meaning of the questions.

Characteristics of Typical Drinking Occasions

The alcoholic beverage which was most likely to be reported as having been consumed on the last drinking day was chibuku, or local commercially brewed opaque beer. Mosi, or local commercially brewed bottled beer (lager) was next in popularity, followed by home brew (legally brewed homemade beer). Consumption of European-type beverages (e.g. whisky, gin, brandy) was reported in negligible amounts. There were no substantial differences between men and women, although there was a tendency for men to prefer chibuku and women mosi.

There were, however, differences between communities concerning beverage choices. Respondents in the rural community were more likely than those in the other two to choose home-brewed beverages and those in the periurban community most likely to choose chibuku, whereas respondents in the suburban community most often chose mosi. It was noted that, although the relative quantity of home-brewed beverages taken in the rural community was not unexpected, the proportions of the commercially brewed beverages were higher than expected. It was found that the youngest age group was most likely to choose mosi and the oldest, chibuku and home brew. It was suggested that this might be a result of mosi being considered a "modern" beverage, as well as its greater cost. Perhaps for the same reasons, choice of beverage was related to educational status, higher educational attainment being associated with an increased tendency to drink bottled beer.

There was also a strong association between the site of drink and beverage consumed, most consumption in taverns being chibuku, in bars mosi, and in shebeens home brew. There

TABLE 15.--Amount of alcohol consumed on the last drinking day as reported by Zambian general population sample,[a] by sex and community (drinkers only, aged 18+ years--rounded percentages)

Units of 5 ml pure alcohol	Periurban (percent)		Suburban (percent)		Rural (percent)		Total (percent)	
	Male	Female	Male	Female	Male	Female	Male	Female
1-9	9	20	7	21	11	15	9	18
10-18	17	40	20	15	14	29	16	27
19-27	28	4	13	21	19	18	21	15
28-36	17	8	18	12	21	12	19	11
37+	30	28	42	32	35	27	35	26
Base (N)	(78)	(25)	(55)	(34)	(80)	(34)	(213)	(93)

[a]Selected from a periurban and a suburban community in Lusaka and a rural community outside Lusaka.

seemed to be little mixing of beverage types, and it was found that those who drank mosi drank less per occasion than chibuku drinkers.

The most popular drinking location was the tavern, about two-fifths of the men and one-third of the women reporting drinking there on their last drinking occasion. There were, however, differences between men and women in choice of drinking sites, women being more likely to drink in a private house and men in public places. In fact, about four-fifths of male drinking occasions were reported to be in public drinking establishments of one sort or another. There were some differences between communities, rural residents being more likely than urban residents to drink in friends' houses or in a combination of places. Younger respondents were more likely than older ones to drink in a bar, whereas older respondents preferred a tavern. Perhaps related to these findings about age, the most educated were more likely to drink in a bar and the less educated in a tavern or private home.

Rather strikingly, spouses tended not to drink together as couples. Only 4 percent of the men reported that their spouses were present on their last drinking occasion and only 12 percent of the women did so. The most frequently reported drinking companions of men were other men (56 percent). Similarly for women, female companions were most frequently involved (39 percent). About one-fifth of the men and one-quarter of the women reported drinking alone on the last occasion. In general, there was a tendency for the drinking group to be defined as one containing companions of the same sex in all of the communities, although there was a tendency for females in the periurban community to drink with male companions and for those in the rural community to report drinking alone.

About half of the men and two-fifths of the women drinkers reported spending over 2 hours on their last drinking occasion. In general, women tended to report spending less time drinking than men, although the only relatively large difference was in the rural community where 55 percent of the men, compared to 38 percent of the women, reported spending over 2 hours. Longer drinking sessions tended to involve opaque beer rather than other types, were more likely to take place in a tavern than elsewhere, and were more likely to involve a member of the opposite sex for men and a companion of the same sex for women than other types of company.

Respondents who drank opaque beer on their last drinking occasion were more likely than those who drank bottled beer or home brew to report consuming larger amounts. Those who drank in a tavern were also more likely than those who drank elsewhere to consume more. The picture that emerged was that taverns were the place for long, heavy drinking sessions at which large quantities of alcohol were imbibed in the form of opague beer.

Characteristics of Exceptional Occasions

A number of different types of occasions were defined as occasions of greatest consumption in the last month, whereas occasions of maximum consumption in the last year tended to be described as parties for special events. Men in the rural community were more likely than men in the other two communities to report maximum consumption in the last month at a special occasion such as a wedding, and those in the periurban community reported such consumption on a pay day. This was thought to be understandable in view of special brewing taking place for special events in rural areas, while, in urban areas money being in short supply, more drinking might well be associated with the arrival of the pay packet. In comparison with typical drinking occasions, exceptional occasions were characterized by more frequent choices of mosi or bottled beer. Exceptional occasions also tended to last longer than typical drinking occasions and there was greater reported consumption as well.

Cultural Definitions of Drinking

Reasons for Drinking

"Drinking is a good way of celebrating" was the reason most likely to be considered somewhat important or very important by drinkers in the Zambian sample as a reason for their

drinking (64 percent of the men and 66 percent of the women). However, the second most likely reason to receive endorsement was that drinking "helps me to forget problems" (53 percent of the men and 64 percent of the women). Overall, differences between men and women drinkers in reasons for drinking were not substantial. Men in the rural community were more likely than those in the other two communities to endorse the various reasons for drinking. Men drinking more heavily were also more likely than lighter drinkers to consider the various reasons for drinking as important.

Reasons for Not Drinking

Fear of problems with the police, acting in a manner that will later be regretted, fear of losing control over life, cost and interference with work were all reasons likely to be considered important by both men and women (each was considered to be very or somewhat important by more that three-quarters of the men and women). The differences between men and women were not large but, in all cases, women were more likely to endorse reasons against drinking than men. Nondrinkers were more likely than drinkers to report reasons against drinking, although drinkers were more likely to emphasize cost.

Attitudes Toward Drinking and Drunkenness

Negative statements toward drinking and drunkenness tended to receive more agreement than positive statements. Men were more likely to agree with positive statements and disagree with the negative ones than women, although differences tended to be less with respect to attitudes toward drunkenness than with regard to attitudes toward drinking. Although there were no differences between the three communities on overall attitudes toward drinking, there were differences in attitudes toward drunkenness, residents of the rural community being more likely to express negative sentiments regarding drunkenness than residents of the other two communities.

Age and Sex Norms

In all communities studied, male and female respondents were most likely to cede the right to drink and to feel the effects of alcohol to a man of 40 (more than four-fifths were willing to permit drinking and more than two-thirds to permit drinking enough to feel the effects of alcohol). This age/sex category was followed by the categories of man aged 60 years and women aged 40 and 60 years. Thus, drinking, as seen from the point of view of the Zambian sample, seemed to be the prerogative of the middle aged and elderly. In general, drinking norms seem to be more attuned to age differences than to sex differences, although there was a tendency for men to be more likely than women to be permitted to drink and feel the effects of alcohol. Boys and girls of 16 years of age were by far the least likely to be permitted the privilege of drinking and feeling the effects of alcohol.

The differences between men and women in the extent of giving approval to drinking by different age/sex categories were not significant, suggesting that females were generally in accord with the viewpoint that they should drink less than men. There was somewhat of a tendency for people to approve drinking and feeling the effects of alcohol in persons close to them in age. Males in the rural community tended to give more support to drinking than their counterparts in the other two communities whereas, among females, those from the suburban communities seemed to be most tolerant. Teachers, policemen, nurses, and public figures tended to be less likely than others in the population of the same age and sex categories to be given the right to drink or to feel the effects of alcohol.

Situational Norms

In all of the communities studied, the situations in which Zambian respondents were most likely to permit drinking and feeling the effects of alcohol were at a party, a bar, and when with friends at home (drinking permitted by more than two-thirds and drinking enough to feel the effects by more than a third). The situations least likely to elicit approval were when driving a car and during working hours, where almost nobody approved of either

drinking or feeling the effects of alcohol. Drunkenness was condoned by very few respondents at any time. Men were more tolerant of drinking and feeling the effects of alcohol than women in almost all of the situations. Rural residents were more likely than their urban counterparts to permit drinking and feeling the effects of alcohol in more situations, and residents of the periurban community tended to be least tolerant of drinking. The youngest age group was less likely than older groups to express approval of drinking and heavy drinking.

Hypotheses Examined

The following hypotheses were examined using the general population data collected in Zambia: 1) males are more positive toward drinking than females; 2) the more "strict" a person's religion, the less tolerant that person will be of drinking; 3) the more often people attend religious activities, the more negative they will be toward drinking; 4) those of higher socioeconomic status will be less positive toward drinking; 5) rural dwellers would be more negative toward drinking than urban dwellers; 6) caution toward drinking would increase with age; 7) the more people drink, the more positive they will be toward drinking; 8) the more educated a person is the more negative that person will be toward drink; 9) the unemployed would be more positive toward drinking than the employed; 10) the widowed, divorced, and separated would espouse the drinkers' cause more positively; 11) those who have never been married would be more positive toward drinking. The first four hypotheses were either supported or partially supported by the data. The last seven, however, were called into question by the findings of the research, which suggests the possibility of challenging commonly held assumptions by doing studies such as those carried out in the three countries.

Alcohol-Related Problems

Current Problems in General Populations

As can be seen in table 16, the most frequently reported trouble related to drinking by both Zambian men and women in the general population survey was the feeling that they should cut down on their drinking or stop. This feeling was reported by about one-third of the total sample of men and one-tenth of the sample of women. Over half the male drinkers and about two-fifths of the female drinkers reported having experienced this feeling in the last year. Other relatively frequently reported experiences included amnesia, getting drunk when there is an important reason to stay sober, hands shaking in the morning after drinking, feeling the effects of alcohol at work, and being ashamed of something done while drinking.

In the total sample, men were more likely than women to report all of the 14 experiences enquired about. However, among drinkers, differences between men and women diminished, women in fact being slightly more likely than men to report at least some of the experiences. Although it appeared on the whole that residents of the suburban community contributed less than the expected number to the total of problems reported, only two differences were statistically significant.

When the first seven items were put together to form a scale of "personal consequences" of drinking, it was found that men were more likely than women to score high, less educated respondents were more likely to score high than more educated ones, housewives were less likely than other occupational groups and those drinking at least three times a week were more likely than those drinking once a week to report one or more personal consequences.

As for the "social consequences" (scale based on last seven items), the youngest age group tended to score highest, followed by the middle-aged group, followed in turn by the oldest. Strict Protestants were most likely to score low. Those getting drunk with intermediate frequency (one to two times per week) were more likely to score high than those getting drunk more often. It was suggested that this might occur because less frequent drinkers (often at weekends) might more often find themselves in situations from which social problems arise.

TABLE 16.--Respondents in Zambian general population sample[a] reporting experiencing problems in the last year as percentages of community totals and drinkers only, by sex (respondents 15+ years--rounded percentages)

	Community totals									
	Suburban (percent)		Periurban (percent)		Rural (percent)		Total (percent)		Drinkers only (percent)	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Personal consequences:										
Felt should cut down or stop	36	9	19	10	34	9	30	9	58	39
Awakened next day unable to remember what I had done while drinking	17	5	11	4	16	9	15	6	28	26
Sometimes drunk when important to stay sober	16	4	13	4	19	5	16	4	31	17
Had hands shake a lot morning after drinking	8	5	6	3	12	6	9	4	17	18
Told by health worker amount has bad effect	6	2	3	3	5	3	5	2	9	10
Have taken drink first thing in the morning	6	3	4	2	12	4	7	3	14	12
Stayed intoxicated for days at a time	6	5	3	1	6	3	5	2	9	10
Social problems:										
Felt effects of alcohol while on the job	18	6	12	8	21	8	17	7	33	33
Been ashamed of something done while drunk	13	5	7	4	12	3	11	4	21	18
Got into a fight because of drinking	4	2	4	3	8	2	5	2	9	9
Been told to leave a place because of drinking	4	1	3	1	6	2	5	1	9	5
Involved in road accident when drinking	6	1	1	1	2	3	3	1	6	3
Involved in accident at home when drinking	2	1	1	3	6	2	3	2	6	7
Involved in accident at work when drinking	2	1	1	1	3	0	2	1	3	2
Base (N)	(165)	(205)	(151)	(223)	(155)	(196)	(471)	(624)	(251)	(152)

[a] Selected from a periurban and a suburban community in Lusaka and a rural community outside Lusaka.

Somewhat surprisingly, there were no significant differences between communities on either the "personal consequences" scale or the "social problems" scale.

Lifetime Interpersonal Problems

One-tenth of the Zambian respondents reported that at some time during their lives a member of their family or friends had remarked on their drinking. About 2 percent reported having experienced difficulties at work related to their drinking and 1 percent reported difficulties with authorities or the police. There were no significant differences between males and females or communities in response to these individual questions. However, on a score based on these three items, respondents living in the periurban community were found to be more likely to report more lifetime problems than those in the other two communities, and men were significantly more likely than women to report lifetime problems except in the rural setting, where fewer lifetime problems generally were reported. Age had an important influence on lifetime problems scores in both urban and rural samples, although not in the direction expected, in that older people were less likely than younger to report having had such problems. It was suggested that this might be explained by the types of items included in the score and the fact that many older people might not admit to a family member having expressed concern regarding their drinking or having been in trouble with the police. It was also found that the higher the respondents' level of educational attainment, the more likely he or she would be to report lifetime drinking problems. Although marital status was significantly related to the lifetime problems score in the sample, there was no significant difference between those who had and those who had never been divorced, suggesting that possible domestic strife does not appear to contribute to the reporting of lifetime interpersonal problems associated with alcohol. The association of lifetime problems with frequency of drinking was not especially marked and no direct relationship appeared. In the case of frequency of getting drunk, association occurred in the urban area only. Those who got drunk once or twice a week were most likely to score high.

As to the most serious alcohol-related problem that had ever concerned family or friends, the most frequent description reported by men was in terms of "spending too much on drink." Men and women were equally likely to mention "coming home drunk." "Being aggressive, fighting, or arguing" was mentioned by about one-tenth of the men and two-tenths of the women. Respondents from the rural community were most likely to describe the problem as "spending too much on drink" or "being aggressive, fighting, or arguing," compared with residents of the other two communities.

Alcohol Involvement in Agency Contacts

Slightly more than one-third of the incidents studied in the police stations were thought to involve alcohol, in the opinion of either the person reporting the incidents or the police. There were no significant differences between the two stations in this regard, although a slightly higher proportion of the periurban community incidents were considered to involve alcohol (39 percent versus 30 percent).

Most of the alcohol-related incidents in both stations were classified as assault. Incidents in the periurban station were more likely than those in the suburban one to be classified as theft, whereas those in the suburban station were more likely to be classified as disorderly conduct. Many of the complainants had themselves been drinking.

In the casualty department, about one-tenth of the men interviewed thought that their drinking had contributed to their hospitalization. About the same proportion thought that they were drunk at the time of hospitalization (13 percent). In marked contrast, only one woman stated that she thought her drinking contributed to the incident that led to her hospitalization. About one-quarter of the men reported that they had been drinking at the time of the incident that led to their coming to the hospital and about one-sixth of the persons interviewed reported a sufficient number of alcohol-related problems to merit further interview. Alcohol was thought to be a major factor by staff in one-sixth of the cases that were assessed and a minor factor in one-tenth. Staff were more likely to consider alcohol as a factor in the case of males than in the case of females. There were discrepancies in the reports of staff and patients in terms of involvement of alcohol, however, staff being somewhat more likely than patients to consider alcohol to be a factor, although there were some

instances where patients stated that they had been drunk at the time of the incident but did not appear to be drunk to the casualty department doctor. Drinking by others was quite often reported to be involved in the incident leading to hospitalization, particularly where respondents themselves had been drinking. Most of the incidents involving drinking occurred in a drinking place or on the way home from one.

Only 11 of the patients interviewed in the health centers were given the Client Interview Forms, which meant that only a minuscule 2 percent of patients interviewed there were thought to have a sufficient number of alcohol-related problems to qualify for further interview. Similarly, virtually none of the patients interviewed in the health centers thought that alcohol was involved in the reason for their coming and it was considered to be a factor by staff in only 4 percent of the cases, for men somewhat more often than for women. It was suspected that project interviewers might have missed anything but the most obvious indication of alcohol involvement.

Five of 17 clients interviewed in the social welfare office were given the Client Interview, suggesting a relatively high rate of alcohol involvement, although the small number of cases precluded further analysis.

Comparison of Different Samples of Drinkers

Patients with identified alcohol-related problems in the casualty department were most likely to report frequent drinking in comparison with patients in the psychiatric hospital or the general population subsample. There were no notable differences between the various samples compared in the reasons for drinking, but there were some differences in importance given to reasons for not drinking, male current drinkers in the general population subsample being most likely to consider each of the reasons to be "very important." Psychiatric patients were more likely than casualty department patients or current drinkers in the general population sample, to report having experienced various problems in connection with their drinking.

Community Response

Attitudes Toward Treatment

As can be seen in table 17, the item pertaining to treatment attitudes that obtained the most agreement by repondents in the Zambian general population sample was "if you had a drinking problem in this community, everyone would soon know about it." This was followed by "if you asked for help with drinking problems in this community, everyone would soon know about it." The item least likely to obtain agreement in the sample was the notion that there are treatments that often succeed with people with alcohol problems. The appropriateness of punishment for drunkenness was a matter of divided opinion, about half of the sample thinking it appropriate. About two-fifths felt that "a man's drinking is his own business" and about the same proportion that "there is not much a community leader or the government can do about alcohol problems." Yet half the sample thought that "if a man drinks and does not support his wife and children, the community should give them help." Finally, about the same proportion would not know where to get help if they had a drinking problem.

Differences in opinion between men and women were not great, although women were slightly more likely than men to say that they would be ashamed to tell anyone about their drinking problem. The most educated group were least likely to agree with statements regarding treatment, with the exception of "there are treatments that often succeed with people with alcohol problems" and "if you have a drinking problem in this community, everybody will soon know about it" where they expressed most agreement.

Sources of Help

A wide range of people and places where treatment might be sought were recommended, including medical assistants, surgery, general practitioners, psychiatric hospitals, social

TABLE 17.--Percentages of respondents in Zambian general population sample[a] agreeing with statements on community responses by community and whether rural or urban (respondents 15+ years--rounded percentages, weighted data)

	Periurban (percent)	Suburban (percent)	Rural (percent)	Total (percent)
There are treatments that often succeed with people with alcohol problems	30	35	32	33
There is not much that community leaders or the governnment can do about alcohol problems	43	43	42	43
A man who is always drunk should be punished	57	53	49	53
A man's drinking is his own business and no concern of the community	44	37	44	42
If a man drinks and does not support his wife and children, the community should give them help	53	51	46	50
If you had a problem with your drinking, you would be ashamed to tell anyone about it	35	46	46	43
If you had a drinking problem in this community, everyone would soon know about it	68	76	65	70
If you asked for help with a drinking problem in this community, everyone would soon know about it	58	65	57	60
You wouldn't want a place where people with alcohol problems get treated to be near where you live	48	56	51	52
If you had a problem with your drinking, you would not know where to get help	53	48	45	49
Base (N)	415-423	420-423	393-399	1,233-1,243

[a] Selected from a periurban and a suburban community in Lusaka and a rural community outside Lusaka.

workers, Party officials, or healers. There were no notable sex, residence, or age difference in these recommendations.

Response to Public Events

All of the four hypothetical events involving drinking inquired about in the general population survey were regarded as serious by Zambian respondents. About half thought that such occurrences happened often. Urban residents seemed to be more likely than rural residents to assess the hypothetical problems as most serious and frequent. Respondents

were especially likely to think that it was appropriate for relatives to intervene in all these situations. They were also relatively likely to advocate intervention by bystanders in two of these situations, but intervention by the treatment system was relatively infrequently recommended, as was intervention by the police. The majority, however, felt that a man should be referred to the authorities for neglecting his family if the family did not have enough food because of his drinking. Urban residents were more likely than rural residents to favor intervention by the authorities and rural women were more likely than urban women to assign responsibility to neighbors and bystanders.

Informal Social Response

About one-third of the men and one-fifth of the women in the Zambian sample said that members of their families or friends had expressed concern about their drinking at some time. Among men, the most frequently mentioned source of concern was a parent, followed by the spouse. Among women, spouses were mentioned somewhat more often than parents. Relatives, friends, or acquaintances were also relatively frequently mentioned. Men were more likely than women to report such concern coming from a parent or a sibling.

There was slightly more concern reported in the periurban community than in the other two, and concern was more likely to come from a spouse and a friend or acquaintance in the suburban community and a parent in the rural community. The most serious problem ever concerning the family was most often reported by men as "spending too much on drink" and by women as "coming home drunk." Women were much less likely than men to report the incident involving "spending too much on drink." "Being aggressive, fighting, and arguing" was somewhat more likely to be mentioned by men than by women. Respondents in the suburban community were least likely to describe the most serious problem as "spending too much on drink."

The reaction of members of families to a relative's drinking problem was most often reported to be advice to reduce or stop, followed by disapproval. Periurban residents were more likely than residents from the other two communities to report disapproval. Suburban community residents were most likely to report receiving advice to stop and rural residents to report "no reaction" or "annoyance."

About 7 percent of the men and 3 percent of the women reported that they had talked to someone about an alcohol problem of their own. Of those who had talked to someone, the greatest number had talked to relatives, followed in turn by spouses and friends. About half reported that they would seek the advice of a spouse or relative but, in general, respondents were reluctant to seek help from others, although this was less the case in the rural area than in the other two areas studied. Fewer than 5 percent of the men and about 1 percent of the women reported that they had received treatment for alcohol problems at some time during their lives.

Client Experiences

Of the patients interviewed in the casualty department, police appeared to be most often involved in referring them there. More than half of the males (54 percent) and almost half of the females (45 percent) who had been sent to the casualty department were sent by the police. Relatives were also frequently involved, as were employers in the case of men (12 percent of the men were sent by employers). Most people, however, came by themselves to the hospital; relatives and friends accompanied about one-sixth of the men and one-third of the women.

Agents' Attitudes

Interviews with staff of agencies provided a rich source of information and one difficult to summarize briefly. However, the agents interviewed by and large seldom saw cases in which alcohol was the explicit reason for referral, but were quite willing to concede that alcohol played a significant part in the causation of the problems with which they dealt. Many of them expressed the view that cases involving alcohol were especially predominant among

people from the lower income groups. Alcohol problems were perceived by the agents on average as lying about mid-way among their priority concerns, and they all expressed an interest in learning more about the nature of alcohol-related problems. In most cases, although the agents displayed a greater familiarity with current scientific (especially medical) conceptualizations about alcohol-related problems than members of the general public, the impression was formed that they tended to underestimate the indirect contribution of alcohol to their workload.

IMPROVING COMMUNITY AND NATIONAL RESPONSES IN ZAMBIA

Problems Posed by Alcohol in Study Communities in Zambia

Drawing on the various sources of information covered in this project, what can be said about the magnitude and nature of alcohol problems in these study communities as a preliminary to the development of improved responses to such problems?

To begin with, more than one-tenth of male respondents in the general population survey reported that they had experienced five out of the 14 troubles related to alcohol in the last year (failed to cut down or stop drinking, sometimes drunk when important to stay sober, awaken next day unable to remember what was done while drinking, felt effects of alcohol while on the job, and being ashamed of something done while drunk). All of these so-called problems were conspicuously less prevalent among women in the sample as a whole but, when drinkers only were considered, the differences between men and women diminished considerably and in fact, women were slightly more likely than men to report at least some of the experiences. By and large, the differences between the three communities were not substantial.

On the basis of the above evidence alone, one might conclude that the level of alcohol problems in the study communities was substantial enough to justify some concern by the community and by national authorities. On the other hand, it should be remembered that the findings are based on self-reports, which may be exaggerated or a result of a misunderstanding of the question. There is, therefore, a need to turn to other sources of information.

The data obtained from the police study provide some additional support for the concern. Slightly more than one-third of the incidents studied were thought to involve alcohol. Of all cases of assault, 55 percent involved alcohol and 70 percent of cases with the complainant drinking were thought to be contributory to cases of assault. In the casualty department, the staff thought that alcohol was involved in over a quarter (26 percent) of the incidents studied. On the other hand, alcohol was reputed to be involved in only a very small proportion of the cases seen in the health center. Whether this is an accurate reflection of reality or due to faulty recording procedures is unfortunately not known, although earlier studies in health centers in Zambia have suggested a higher proportion of cases involving alcohol.

Another source of evidence is the interviews with the staff of agencies. There it was found that although most agents did not routinely ask clients or patients about their drinking, most claimed to be carrying fairly substantial workloads of cases involving alcohol, about two-fifths of the agents spending more than half their time on alcohol-related problems. On the basis of these various sources of information, it would not be unreasonable to conclude that alcohol-related problems were widespread and of sufficient magnitude to be of concern in the study communities, thereby justifying an attempt to improve responses to such problems.

Themes Suggested by the Research

"All or None"

Perhaps the theme that emerged most clearly from the Zambian research was what might be called the "all or none" theme. That is, although there appears to be a large proportion

of abstainers in the Zambian population, those people who drink appear to drink both frequently and in large amounts. This applies to the population as a whole as well as to clients coming to the attention of various agencies for treatment. In general, there appears to be little distinction between drinking and drunkenness. In other words, if one drinks in Zambia, one usually drinks to get drunk and the main alternative to being a regular, heavy drinker is to be a total or virtually total abstainer.

This "all or none" theme invades other aspects of the findings as well, in that it seems to be a key component in the social control of drinking in Zambia. The preferred strategy for limiting drinking seems to be total abstention, such abstention being prescribed for young people in particular, but also for women to a greater extent than men. There also appeared to be some evidence that this "all or none" approach to social control over drinking was more pronounced in the urban than in the rural communities in that drinking was admitted by more of the younger respondents in the rural sample, and more of the drinking reported there was described as occurring in people's homes. It is suspected that young people not only reach adulthood earlier in rural communities but that they are more under the eye of their elders during their adolescence. Furthermore, villagers are probably better able to regulate drinking behavior so as to minimize its socially distruptive consequences than are urban communities, where anonymity reduces the scope for informal social control.

Rural/Urban Residence

Whether this interpretation is valid or not, however, an important theme of the Zambian research is rural/urban residence. In almost all aspects of drinking examined in this project there were rural/urban differences of note. Rural residents were more likely to be drinkers, to report frequent drunkenness, to start drinking earlier, to drink home brew, to spend more time drinking, to endorse reasons for drinking, to be more tolerant of drinking and drunkenness, and to be more favorable toward intervention of other members of the community in alcohol-related problems. Somewhat surprisingly, however, they were not more likely to report having experienced drinking problems than residents of the other communities, although it is possible that this may be due, at least in part, to greater consumption of home brew or beverages of lower alcohol content.

Commercialization of Production

Linked with the theme of place of residence is the commercialization of production. As noted in the introduction to this chapter, outlets for commercially brewed beverages are somewhat less developed in rural areas than in urban areas. Also, as noted above, rural residents seem to be more likely to brew their own. Nevertheless, there is some evidence of an increase in the availability of commercially brewed beverages in rural areas.

Role of Police

The role of the police in dealing with alcohol-related problems is another theme emerging from the studies. As noted in the police case study, quite a large proportion of cases coming to their attention seemed to involve alcohol. Fear of the police also seemed to be a relatively important reason for people not drinking or being careful about their drinking.

Isolation of Services

Perhaps related to the role of the police is the isolation of services. As found in the agency study, there was little interaction between agencies, and those working in agencies were not fully aware of the functions of other agencies. Furthermore, there was little referral specifically for alcohol problems and little training available.

Implications of the Zambian Project for Action

Based on the research carried on during the first phase of the project, the Zambian collaborators identified a number of implications for action at the local and national levels.

Implications for Improving the Local Response

Before identifying specific implications of the research for local action, the Zambian collaborators stressed the need for considering local action in the context of wider issues and trends in Zambian society. In particular, they noted the importance of implementing primary health care in Zambia and the closeness in philosophy between the primary health care movement and the Community Response project. They also pointed to the government's policy of decentralization and encouragement of local communities to take more direct responsibility for their own affairs. The structure of these policies suggested that efforts to improve community responses to alcohol problems could be based upon Party Section Committees or special subsidiary committees in the rural areas and new Primary Health Care Committees in the urban areas.

They also noted the difficulty of defining the community in the rural area because of the low population density and the difficulties in bringing an effective group together regularly. They suggested that it might be more feasible to begin activities at the village (or village-group level).

Another issue considered was the extent to which the research team or other external group should be actively involved in the process of promoting improved responses to alcohol problems at the local level. The need to avoid a "community repressive" approach was stressed (Werner 1980). One implication of this was that the team had to be extremely careful regarding how directive it should be in putting forward implications for action at local levels. Nevertheless they did suggest some possible responses arising from the data.

For one, the findings suggested the need to provide accurate information on alcohol problems to any community groups established to respond to such problems. It was apparent from the research that there were many misconceptions about alcohol among community members that might be corrected by an informed community group sharing the knowledge provided by the project with other community members and perhaps special groups such as parents and school children. It was suggested that it would be desirable to try to actively involve community members through discussion or drama to make the information more relevant to the local situation.

The findings from the research also suggested that there may be a particularly great need to attempt to change attitudes and drinking patterns that lead to frequent drunkenness. The community might take a number of actions including promoting proper licensing of all outlets, attempting to control the quality of home-brewed beer or even distilled beverages, encouraging bars and taverns to introduce limits to permissible behavior, and generally promoting an attitude such as "people are not seen drunk in public around here."

The research found that although many agencies and service providers are aware of alcohol-related problems, the alcohol component is often missed. It was felt, therefore, that there was a need to improve the quality of training of agency staff with regard to the alcohol dimension of their work. While it was recognized by the collaborators that a community action group may not be able to improve the training of such agents directly, they may be able to ensure that this is done by insisting that a particular agency worker receive extra training or by forming a small group who will acquire experience in helping people with alcohol-related problems and to whom these people may be referred.

Throughout their suggestions for action the collaborators recognized the above-mentioned differences between the rural and urban communities. They continually stressed the need for considering the development of different approaches for rural and urban areas based on local assessment of needs and possibilities.

With regard to the theme of commercialization noted above, it was suggested that at a minimum each community might well attempt to collect information on this matter as well as on the availability of nonrecorded quantities produced. In addition, it was felt that local action may be required to ensure that the trend is not toward increase and that regulations concerning permissible ages of drinking are enforced.

As for the role of the police, the collaborators suggested that it would be worthwhile to explore their potential in the management and prevention of alcohol-related problems. The

need for further training was emphasized as was the need to encourage collaboration between the police and other agencies dealing with alcohol-related problems.

Implications for a National Response

In discussing the implications of the project for action at the national level in Zambia the collaborators referred to some of the national factors that must be taken into account. In particular, they referred to the important role of the United National Independence Party, which, under the leadership of President Kuanda, has shown keen interest in alcohol problems and made important recommendations concerning preventive policies, some of which were partially implemented. Thus, the Party, through its social and cultural subcommittee, would likely be critical in ensuring an improved national response to alcohol-related problems.

The collaborators also again noted the national primary health care system and its commitment to emphasis on intersectoral collaboration at all levels. They concluded that similar intersectoral cooperation would be necessary in promoting a national response to alcohol-related problems.

Based on these and other considerations and their analysis of the data, the collaborators put forward the following proposals for national action to respond to alcohol-related problems in Zambia:

(1) The Government should establish a 'drink and drugs' commission, preferably as a statutory body, that will report regularly to the Party, the Government, and the general public on its progress.

(2) The Zambia National Council on Alcoholism and Addictions (ZNCAA) should be revived.

(3) Each Government ministry and every other public institution should establish procedures for identifying and responding appropriately to alcohol-related problems affecting individual members of its staff, or (where appropriate) the students in its care. The Ministry of Health should take a lead in setting guidelines for this.

(4) The Public Service Commission should review its policy and procedures in respect to offenses relating to alcohol, with special attention to types of proof required to substantiate allegations of drinking while on duty and to the provision of assistance to persons found to be afflicted by alcohol-related disabilities.

(5) The Ministry of Health should, in addition to item (3)

- consider setting up a special unit on alcohol-related problems;
- develop and disseminate public education materials on ways of responding to alcohol-related problems, through its Health Education Unit, and in collaboration with the Ministry of Education and Culture and the University of Zambia;
- organize inservice seminars and workshops for health personnel on alcohol-related problems;
- review the curricula of all health training institutions to ensure the adequate coverage of alcohol-related problems;
- examine further policy implications of this study and the phase II study, especially with reference to the Primary Health Care program.

(6) The Ministry of Home Affairs should, in addition to item (3):

- establish improved procedures for the detection, certification, routine recording, and reporting of alcohol as a factor in various types of incidents, and specifically explore the use of the breathalyzer in this connection;

- compile regularly, monitor, and publicize statistical information arising from those reports;

- establish improved procedures for liaison between the police and prison authorities and the health services, with a view to the identification, appropriate short-term management, and longer-term rehabilitation of individuals with chronic alcohol-related disabilities;

- step up the enforcement of the law in relation to liquor licensing and the conduct of licensed premises;

- incorporate more information on alcohol-related problems in the curricula of its training programs for police and prison officers, including items (a), (c), and (d) above;

- review the existing policy on prosecution for offenses relating to the abuse of alcohol.

(7) The Judiciary, in addition to item (3), should incorporate the following topics into its training courses and conferences for magistrates:

- sentencing policy and its value in relation to alcohol-related offenses;

- the influence of alcohol on behavior, especially in the case of persons who may appear to be mentally disordered;

- the nature of personal consequences and social problems arising from the abuse of alcohol.

(8) The Ministry of Education and Culture should, in addition to item (3):

- develop teaching materials on alcohol-related problems for inclusion in the curriculum of primary, secondary and further education;

- encourage teachers to participate in community-based efforts to educate the public and to counsel individuals on alcohol-related problems.

(9) The Division of Provincial and Local Government in the Office of the Prime Minister should:

- examine the implications of the present study for the implementation of the policy of administrative decentralization with respect to the production and sale of alcoholic beverages;

- review existing procedures for the enforcement of the liquor licensing laws, and consider the establishment of an 'inspectorate' for this purpose;

- identify and promote various ways of raising local government revenue as positive alternatives to an excessive reliance on the production and sale of alcohol.

(10) The Ministry of Finance should consult with the statutory body proposed under recommendation (1) in setting the levels of duty to be levied on the importation and sale of alcoholic beverages.

(11) The Ministry of Labor and Social Services should, in addition to item (3):

- encourage employers and trade unions to study the economic cost to the nation of month-end absenteeism and other alcohol-related problems in industry;

- incorporate more information on alcohol-related problems in the training curriculum for officers of its Department of Social Welfare;

- institute improved procedures in the Department of Social Welfare for routine data collection, reporting and liaison with health services with respect to alcohol-related problems.

(12) The University of Zambia should, in addition to item (3): continue to conduct research into various aspects of alcohol use and work closely with the statutory body proposed under item (1); with the ZNCAA (see item 2); and with the relevant government ministries, statutory bodies, and voluntary agencies. In planning further research in this way, the University should seek to make full use of the data collected in the present study.

Implications for Research

The collaborators recognized the lack of resources for carrying out further research but nevertheless suggested a number of projects that emerged as possibly important during the first phase in the hope that some of them may be carried out. Among them were the following:

- Continuing analysis of data from phase 1, perhaps using more sophisticated statistical techniques.
- Repetition of parts of the project in other Zambian communities, perhaps in one or more Copperbelt towns or in selected rural areas.
- Observational studies of drinking practices and of agency practices.
- Historical and economic studies of drinking in Zambia. In particular, there should be studies of the economic consequences of drinking and of economic factors affecting the consumption of various types of beverages and changes in consumption.
- Studies of particular agencies. For example, within social welfare and community development offices both the collection of baseline data and research directed at the testing of hypotheses such as "parental drinking produces predictable and measurable consequences for children" might be desirable. Further studies of the way in which police, general hospitals, and casualty departments deal with alcohol problems were suggested as being particularly useful.
- Sociomedical studies. These might include: studies of the association between drinking, prostitution and several diseases; studies of types of alcohol-related mental illnesses; studies on the frequency of occurrence of "personal consequences" of drinking and their relationship to the possible existence of the alcohol dependence syndrome; studies of the relationship of liver cirrhosis, vitamin deficiency states and abnormalities of red blood cells to drinking; and studies of the relationship of alcohol to violent death.

Actions Taken to Improve Responses to Alcohol-Related Problems in Zambia

The Zambian collaborators helped to initiate action at local and national levels in relation to alcohol problems during both phases of the project. They monitored these actions using a variety of approaches drawn from the monitoring protocol including recording minutes of meetings, preparation of monthly progress and other kinds of reports, maintenance of a log book, interviews, observations, and development of a reporting system.

Action at the Local Level

The general strategy used by the Zambian collaborators to attempt to improve local responses to alcohol problems was defined as multiple, participatory, and open-ended.

The three main strands of the multiplex strategy were: working with communities of local residents; working with the health services; and working with the police. A fourth strand that came to assume considerable importance was designing and distributing information.

The participatory strategy was to be achieved by facilitating the implementation by local residents of their own chosen plans, working with local committees and working from the bottom upwards by inviting front-line health workers and police officers to identify problems

they confront in the course of their routine duties and to develop, with the assistance of the research team, strategies for overcoming them.

With regard to open-endedness, the project was designed to stimulate and monitor changes in an exploratory fashion rather than to assess progress toward a predefined set of targets. In the case of the local residents' committees, in particular, it was assumed that they should set their own pace of work and define their own objectives, since a central question of interest to the project team was how these communities would set about the task of improving their own immediate situation. As pointed out by the collaborators, one significant implication of this open-ended approach is that there is no easily defined terminal point at which the enterprise should be assessed. Thus, the project in Zambia is still considered to be incomplete and ongoing.

Regarding the first main strand of the multiplex strategy used by the Zambian team (i.e. working with local committees), attempts were made to establish community action groups in the three communities that participated in the first phase of the project in Zambia.

In the suburban community, an executive for a community action group was elected in early 1981. The chairman was the ward chairman. Several meetings with fluctuating attendance were held during the first half of 1981. All meetings were initiated by the research team. Committee members identified illegal brewing and excessive drinking by women as issues and suggested banning illegal brewing and introducing educational clubs as possible solutions. A subcommittee was formed to identify illegal breweries and to obtain a representative for the committee in this regard.

At the first of two pre-National Conference seminars, representatives from the community claimed success in securing a farm to provide gainful employment for youth, in developing projects for women, and in forming a social and cultural committee. They also recommended that another community center be built in their area, that mothers with small children not be allowed to enter bars, that beer consumption at official functions be minimized, that the supply of beer to existing bars and taverns be increased, and that political education be intensified.

In the periurban community, several meetings were held in early 1981 to discuss alcohol issues and consider the possibility of forming a community action group. In addition, a ward council meeting raised the matter of forming a planning group after a review of alcohol problems by various representatives. Although an executive for a community group was elected, such a group did not become active. However, church leaders and the ward council expressed preparedness to address alcohol related problems in the course of this work. The following issues related to alcohol were identified in the community meetings: divorce, fights, starvation, coming home late, failure to buy school uniforms, loss of employment, diseases, and illegal brewing. Possible solutions to excessive drinking were put forward (Rootman 1983, appendix II, annex 4.1).

Representatives from the periurban community also participated in the pre-National Conference seminars. At the first seminar, they reported that they were able to introduce some small-scale industries to assist home brewers in finding an alternative source of income and to initiate sewing and baking classes. They also reported plans to introduce a poultry farm, to extend the market to accommodate more stalls, to obtain a platform for dancing, to organize meetings for youth on the dangers of alcohol, and to establish a carpentry shop.

In the rural community, efforts to form community action groups were channeled through already established village health committees, none of which had identified alcohol-related problems as an issue. Although meetings were held in three of the villages, efforts to establish community action groups were unsuccessful. There was, however, a general concern with excessive drinking in one of the villages and cattle rustling, the negative influence of urban visitors, prostitution by urban girls, and uncontrolled bar opening times were issues of community concern in another village. In addition, a meeting in one village brought forth the following suggestions for the attention of the village headmen: the possibility of locating a central selling point for locally brewed beer; that brewing be done alternatively among villages; that except for 'work beer,' beer drinking be restricted to weekends; and that concerted efforts at promoting sports activities be encouraged. In another village, the following were suggested: involving the Party in educating the community on the damages of

excessive drinking; encouraging home brewers to sell their beer after working hours only; and involving relatives in dealing with their unbecoming urban visitors. These suggestions were also presented by the community representatives at the pre-National Conference seminar held in the rural community.

Representatives from the three communities attended the National Conference itself and participated actively. Partly as a result, a number of the recommendations adopted by the Conference reflected their concerns and possibilities of action at the local levels. For example, it was recommended that "District Councils throughout the country should be encouraged to form community action groups for mobilizing community response to alcohol-related problems and that the existing committees such as trade unions, work councils, and their equivalents should be responsible for setting up such action groups at places of work" and that "women who have suffered abuse should be encouraged to set up self-help groups to overcome problems of stress arising out of violence related to drinking in the family." Other proposals for community action were put forward in the study groups (Rootman 1983, appendix II, annex 4.3, pages 6-16).

In addition to working with community groups to mobilize communities to deal with their alcohol problems, the team formulated and used a complementary strategy: educational drama. This strategy built on the experience gained by the "Theater for Development" workshop held in Zambia under the auspices of the International Theater Institute and other supporting organizations in 1979. A freelance "popular theater" team was recruited. The team worked in collaboration with the Community Response project team at the Institute for African Studies. They developed plays to illustrate the nature of alcohol problems in the periurban and rural communities. The plays were developed on the basis of the previously completed research in the study communities as well as extensive discussions in those communities during visits by the theater team itself. The team then performed these plays in the two communities using local languages and obtained feedback from the audience and local leaders. Description of the plays and their experiences in the two communities is contained in the final phase II report (Rootman 1983, appendix II, annex 4.1, pp. 60-75). The theater team presented one of the community plays at the National Conference as well as a play composed specially for the occasion.

Following the National Conference, the project team decided to discontinue active intervention in the communities for 6 months to determine if they were able to sustain their activities themselves. In June 1982 they visited the communities to find out what actions had occurred since the meeting in November. It was apparent in all communities that very little if anything had been done in that time period. However, some interest was expressed in the suburban and rural community in continuing to meet and to explore ways of resolving alcohol-related problems. In one of the villages in the rural community, the possibility of obtaining funds for theater groups to dramatize alcohol-related problems was inquired about. The project team offered to serve in an advisory capacity for the communities if required.

A variety of materials were developed to assist the communities develop appropriate approaches to deal with alcohol problems. These included: guidelines for members of the local community action groups; summary of findings from phase I of the Community Response project; and a list of options for intervention by communities called "the menu." Some of these materials were translated into two of the local languages (Rootman 1983, appendix II, annexes 4.1-4.3).

The team also developed materials to assist itself in working with local communities including a conceptual framework, a framework to classify domains of intervention, a list of feasible activities and guidelines for communications (Rootman 1983, appendix II, annexes 4.1 and 4.2).

With regard to the second strand of the Zambian project, namely, working with the health services, the main vehicle used was another World Health Organization project for recording health problems triaxially. The three axes for this project were biological, social, and psychological and covered more than alcohol-related problems. The objectives in relation to alcohol-related problems were: to provide a framework within which health workers in the three target communities could record specific instances of alcohol-related problems as they turn up in the course of their routine work; to provide an appropriate record form for monitoring the progress of cooperative management strategies involving other social agencies and other clients as well as the individual target patient; and to develop a yardstick against

which the contribution of alcohol to health problems in a given health center's caseload could be estimated relative to other causative factors.

Two separate exercises were designed to elicit in an open-ended fashion selected health workers' perceptions of priority problems in the social and psychological domains contributing to their caseloads. Exercise A required medical assistants and nurses at four health centers to record in their own words "three problems which you think have contributed to this patient coming to see you today, one of each kind as follows: physical problem, psychological problem or social problem," in respect to an actual sample of cases encountered over a period of 1-2 weeks. This was done using a simple form. Exercise B was addressed to fully trained medical practitioners and sought to elicit their own interpretation of the patterns of social and psychological problems contributing to their caseload over a long period. Information was solicited by a letter sent to physicians at the clinics in the urban communities and at the hospital in the rural community as well as from a private practitioner in a medium- to low-income surburb of Lusaka.

From exercise A, it was clear that paramedical staff at the health centers sampled were aware of patients with substance-related psychological problems. These included problems arising from the use of alcohol and marijuana. From exercise B, it was clear that the medical practitioners consulted regarded alcohol problems as ranking high on the list of psychological and/or social problems with which their patients presented. Additional results of these two exercises are presented in appendix II, annex 4.2, pp 103-110 of the final phase II report (Rootman 1983).

In addition to these two exercises, the Community Responses team assisted the principal medical assistant at the rural hospital to compile and analyze the statistics on accidents and injuries treated at three of the health centers in the area between 1978 and 1981 to see whether or not the incidence of injuries rose during the post-harvest season. It was in fact found that there was a trend for the rate of injuries treated at a given health center to drop between the first and second quarters and for it to rise in the second and third quarters. It was suggested that, as hypothesized by the local health staff, one explanation for this could be an increase in excessive drinking following the end of harvesting before the next planting season begins.

With regard to the third major strand, working with the police, this consisted mainly of developing a proposal for a community police project. The proposal was based on an analysis of the findings of the first phase of the Community Response project, an analysis of the nature of police work and followup discussions with police officers. The goals of this project are:

- an increased formalized contact between the police, community committees, and other agencies to work on problems within the communities participating in the project;
- the use of data from these contacts in defining community problems requiring police response in accordance with agreed patterns of work;
- increased visibility for the police, playing more preventive roles than punitive roles;
- a more informed community police geared toward reducing the chances that more people commit alcohol-related crimes and are involved in accidents in which alcohol is a significant factor; and
- a movement toward progressive decriminalization of public drunkenness in all its legal shades.

The project is envisaged as having two levels--research and demonstration. In the first, more systematic studies would be carried out to determine the current status and trends in alcohol-related problems in police work. In the second, information already available would be used to design a demonstration project for the police stations in suburban and periurban communities and the Lusaka Central Police Station. The demonstration project is seen as having four components: workshops; a reporting system; an Alcohol and Drug Information Office; and a cross-agency referral system. Discussions with senior officers of the Zambia Police Force suggested that police roles in family violence would be a suitable focus for this project (see Rootman 1983, appendix II, annex 4.1, pp. 124-26 for more details).

Action at the National Level

A number of important actions took place at national level during phase I of the project. One such action was discussion of a preliminary report of the project at a meeting of the Social and Cultural Subcommittee of the Central Committee, which is the chief policy-making body of the United National Independence Party. Contact was also established with the Secretary and Deputy-Secretary to the Cabinet to discuss the need for a national committee to deal with alcohol problems. Copies of the preliminary report were provided, and at a Permanent Secretarial Conference it was decided that an Interministerial Committee be convened by the Minister of Health. Finally, two of the principal collaborators in the first phase were heavily involved in the development of an overall mental health plan for Zambia. One chapter of the plan was devoted to strategies for dealing with alcohol-related problems and highlighted the potential role of the Community Response project.

The main national-level activity carried out in Zambia during phase II was the planning and execution of the National Conference on Community Response to Alcohol-Related Problems.

The general aims of the Conference, held in November 1981, were: "to make available to a wider national audience the findings of the phase I study, to discuss with representatives of the communities sampled and with representatives of other sectors of Zambian society the implications of these findings, to bring all these resources to bear on efforts to formulate practical, realistic policy recommendations to those institutions required to take measures to deal with identified problems, and to identify areas of further need for information." In accordance with these aims, the Conference was arranged so that much of the time was spent in group discussions that dealt with the core issues raised by the findings of the first phase of the project. The Conference adopted many of the recommendations noted above, and was reported in a number of articles on alcohol problems in Zambia's national newspapers.

Following the Conference, the proceedings were published and distributed. In addition, letters were sent by the Mental Health Coordinating Group of the Ministry of Health to various other ministries and agencies drawing their attention to its recommendations and suggesting that they follow up those recommendations specifically addressed to them.

As a result, a number of the recommendations of the Conference have been implemented or are in the process of being implemented. For example, Recommendation 5, which called for the Ministry of Health to "develop and disseminate public education materials in ways of responding to alcohol-related problems, through its Health Education Unit and in collaboration with the Ministry of Education and Culture and the University of Zambia", resulted in the development and dissemination of new posters on alcohol problems through collaboration of the parties noted in the recommendation. Similarly, Recommendation 12, which called for the University of Zambia to continue research in various aspects of alcohol use and to make full use of the data collected in the study, has been implemented. Specifically a number of studies on alcohol use were subsequently carried out by the Institute for African Studies, the reports on the project have been published and disseminated by the Institute and presentations based on the project have been made to Zambian and international audiences.

ASSESSMENT AND FUTURE DIRECTIONS IN ZAMBIA

Assessment of the Project in Zambia

Assessment of Phase I

The Zambian collaborators encountered a number of difficulties in carrying out the first phase of the project. These included: a lack of useful background information; an absence of appropriate sampling frames, particularly in the rural area; a lack of trained interviewers; language difficulties; a lack of adequate analysis facilities; untoward events such as flooding; and a shortage of other resources for carrying out research. Nevertheless, with patience and innovation, they were able to successfully overcome most of these difficulties and complete the first phase in an exemplary fashion. In the process of doing so, they

learned a number of lessons that should be extremely valuable to others wishing to carry out similar projects in developing countries. An attempt has been made to capture these lessons in the guidelines which have been published by WHO (Rootman and Moser 1984).

On reflection, the Zambian collaborators felt that, in spite of the difficulties and hard work, the first phase of the project was worthwhile for a number of reasons: it succeeded in bringing together information on alcohol problems in Zambia that had never been brought together before; it enhanced the understanding of alcohol problems in Zambia; it helped develop the skills necessary to carry out this type of work again in Zambia; it raised awareness of alcohol problems in Zambia; it led to the suggestion of possible ways of improving responses to alcohol problems at local and national levels; and it provided the basis for continuous monitoring and study of such problems.

Assessment of Phase II

The Zambian final report on phase II of the project contains a detailed and critical appraisal of the efforts to work with community groups during the second phase of the project. Concluding that "the particular strategies employed by the research team did not give rise to a pattern of community response as envisaged in the original objectives, " the team attempted to account for this failure (Rootman 1983, appendix II, annex 4.1).

In doing so, they suggested that there were factors specific to the community and to the researchers or promoters of the project that might account for the difficulties in achieving the objectives. Among the key community-specific variables that may have hindered the formation and maintenance of community action groups were: demographic/ecological conditions, local political structures and external linkages, previous experiences with other programs, expressed needs of the communities, confidence in the action of policy makers and program administrators, and intra- and intercommunity conflicts. As for factors arising out of the research team itself and its activities, according to the final report "it is evident that the team faced serious problems in the identification of appropriate power centers, in mobilizing community resources and in sustaining community interest". The report further notes that "these difficulties may be attributed to questions of research skills, the time available to researchers and research team continuity". The team suggested that such community-specific and resource-specific variables should be considered and analyzed in advance by others wishing to undertake similar kinds of projects.

In concluding their report, the Zambian team offered the following advice based on their experience: "one must understand the dynamics of the community process and translate this into the community mobilization effort. This process must involve the community at every stage. In addition, one cannot fully appreciate the intricacies of the community action process by working from outside. This requires knowing the community by participating in community activities in order to develop sensitivity to different interests, values and concerns of that community." (Rootman 1983, appendix II, annex 4.1).

Although the Zambian team felt that the objectives with regard to mobilizing community support were not fully realized, it is clear from their report that most of the other stated objectives of the project were in fact achieved. In addition, they felt that certain activities undertaken during phase II were particularly valuable and might be applicable in other circumstances. The use of the theater group to dramatize alcohol problems was thought to be particularly worthwhile and generalized to other circumstances. In fact, as a result, the same approach was subsequently used in Zambia for mental health education.

Plans for Further Activities

As mentioned, activities associated with the Community Response project are continuing in Zambia even though phase II has formally come to a close. In particular, the work with the police is continuing as is the work with the Health Education Unit of the Ministry of Health. The Government of Zambia and other national agencies are also still considering the implications of the recommendations of the national conference for their actions. For example, the Mental Health Association of Zambia is considering mounting a project to examine alcohol problems in a number of communities using the experience gained through the first phase of the Community Response project.

The participants in the project are also planning to carry out some further studies of alcohol use and problems. For example, interest has been expressed in exploring the question of how alcohol abuse by parents affects the nutritional status of their children and in studying "acute psychoses" with special reference to drug and alcohol-related psychoses.

Thus, it is expected that the project will continue to have repercussions in Zambia. In addition, it is expected that the Zambian team will maintain liaison with interested parties in other African countries wishing to undertake projects similar to the one carried out in Zambia.

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PART III

DISCUSSION OF EXPERIENCES AND RESULTS OF THE PROJECT

Now that the experiences of the three participating countries have been described in detail, it is time to step back and reflect on them as a whole. Comparisons of various sorts, both between and within countries, are presented and discussed in chapter 6. In the seventh and final chapter, an attempt is made to assess how far the objectives as originally stated were actually achieved, and to consider what might be done in the future on the basis of the experience acquired to date.

CHAPTER 6

COMPARISON OF FINDINGS AND EXPERIENCES IN PARTICIPATING COUNTRIES

THE VALUE OF COMPARISONS

The preceding three chapters presented the results and described the experiences of the collaborators in the three participating countries and drew conclusions and implications for action for the communities and countries involved. It is also possible to draw conclusions and implications for other countries and for international action from a comparison of both the findings and the experiences of the collaborators. An attempt is made to do so in this chapter.

Before doing so, however, it should be stressed that the information collected and experience obtained in this project consitute an extremely rich storehouse of knowledge that can and should be tapped for its national and international implications for many years to come. The collaborators have in fact continued to do so since the formal ending of the project and have produced an extensive cross-cultural analysis of some of the data which should be published shortly (Roizen et al., unpublished). Thus, the conclusions and implications presented here represent only a few of the major ones that might be drawn from the project, and more should be drawn in the future.

CONCLUSIONS FROM COMPARISON OF FINDINGS

Striking Differences

One of the conclusions that emerges from considering the findings from the three countries and comparing them with one another is that there are striking differences both within and between the participating countries in drinking patterns, in cultural definitions of drinking, in drinking problems, and in responses to such problems.

Differences Within Countries

As noted in the preceding chapters, there were significant differences among the various communities studied, particularly in Mexico and in Zambia. Among other things, rural men in both Mexico and Zambia were more likely than their urban counterparts to report drinking greater quantities of alcohol and getting drunk more often. Men in the rural community in Zambia were found to be more tolerant of drinking than those in the urban communities, whereas among women, those from the suburban community seemed most tolerant. In Mexico, more alcohol-related problems were reported by residents of the rural community than by urban residents, whereas in Zambia, problems were most likely to be reported in the peri-urban community. Similarly, there were differences in both Mexico and Zambia between the community samples in reported informal social responses to alcohol problems. For example, rural women in Mexico were more likely than urban women to be concerned about excessive

drinking by their spouses, teenage children, and parents. Thus, at least in Mexico and Zambia, it appears as if local communities have a unique constellation of drinking patterns, norms, problems, and responses to alcohol.

The fact that there are such differences between communities strongly suggests that any solution to alcohol problems must be tailored to fit the local circumstances. In other words, there is no "magic bullet" that is going to eliminate alcohol problems in every community. The fact that there were not comparable differences between the communities in Scotland does not invalidate the above conclusion, since, as the Scottish collaborators suggested, the "rural" community chosen for study in Scotland was really part of the Lothian urban community and differences might have appeared had the choice of communities been different.

In addition to differences between communities, the collaborators found many differences between demographic and social groups within their countries. In particular, differences in consumption patterns, attitudes, problems, and responses were found between various age and socioeconomic groups. The fact of such differences has implications also for developing appropriate responses to alcohol problems. It suggests that in addition to tailoring intervention approaches for particular communities, it is probably necessary to tailor them as well for particular groups within those communities. Such groups may differ from place to place.

Thus, one of the important conclusions to be drawn from the findings of the project that has implications for the participating countries as well as others is that a solution to alcohol problems designed for one area may not be very helpful in another. Each community must therefore come to terms with its own constellation of behaviors, attitudes, and problems related to alcohol and develop appropriate solutions.

Differences Between Countries

The collaborators were acutely aware of the fact that the samples chosen for study in the three countries were not necessarily representative of the countries. However, they felt that it might be useful from the point of view of developing questions for further study and perhaps for drawing implications for action to treat them as if they were. A preliminary cross-cultural analysis was accordingly carried out using this assumption (Rootman and Moser 1983, annex 41). This analysis and further analyses based on the data also compared the samples from the countries in terms of relationships between variables. These analyses, if nothing else, certainly strongly support the hypothesis that there are substantial differences between countries in all dimensions related to alcohol.

For example, it was found in the Scottish community population samples that most people drink and do so frequently, but in relatively moderate amounts, whereas in the Mexican samples those who drink do so infrequently and in large amounts. In contrast, in the Zambian samples, it appeared as if only a minority drink alcohol but those who do, drink frequently and in large amounts. That is, the findings suggested a picture of more concentrated episodes of alcohol consumption in the Zambian and Mexican samples. Moreover, there were differences between samples studied in choice of beverages, location of drinking, drinking companions, the timing of drinking, and the nature of exceptional drinking occasions. As noted above, rural/urban differences in drinking practices seemed to be more substantial in Mexico and Zambia than in Scotland. There was also a tendency for the relationship between age and drinking to be different in Scotland from that in Mexico or Zambia. Younger people in Scotland were more likely to drink frequently and in large amounts than their older counterparts, the opposite being the case in the other two country samples. In general, sex seemed to be a more important determinant of drinking behavior in Zambia and Mexico than in Scotland, whereas in Scotland, age was a crucial factor.

With regard to cultural definitions of drinking, women drinkers in the Zambian samples were more likely than men to approve of reasons for drinking, whereas men were more likely than women to do so in both the Mexican and Scottish samples. At the same time, men in Scotland were more likely than women to endorse reasons against drinking, but the opposite was found in the Mexican and Zambian samples. Age seemed to be more important in determining the acceptability of drinking and getting high in the Zambian samples, whereas sex

was more important in the Mexican. Rural/urban residence seemed to be more important in determining views on drinking in the Zambian samples than in the samples from other two countries. In the Zambian samples there was also a tendency for the acceptability of getting high to be more like the acceptability of drinking than in the samples from the other two countries.

As for drinking problems, one of the most notable differences was in the pattern and number of problems associated with drinking reported by respondents in the samples from the three countries. Mexican men, in particular, were more likely than their Zambian and Scottish counterparts to report both personal and social problems associated with their drinking. Whether this represents a real difference in the level of problems experienced or a greater tendency to report such problems is unknown, but is certainly worth exploring further. Another notable difference was in the relationship between personal problems and age--in the Scottish samples, the problem rates were highest among young males, whereas among Mexican males the rates appeared to increase with age. Among Zambian males, age seemed to have little impact. A third notable difference was that although self-reported problem rates were higher for men than for women in all three country samples, the difference between male and female drinkers in Zambia was not large, especially in number of social problems reported.

Finally, there were striking differences in community responses to alcohol problems between samples in the three participating countries. For instance, there were markedly different structures of opinion on the management of alcohol problems, the Scottish samples favoring treatment and opposing punishment, those in Mexico favoring both, and those in Zambia supporting punishment but not treatment. At the same time, Zambian respondents endorsed a greater range of approaches to intervention than those in the other two countries. There was also greater advocacy of intervention in alcohol problems by neighbors and bystanders among Mexican and Zambian respondents than among the Scottish and more endorsement of intervention by police or other authorities in Scotland than in the other two countries. Respondents in Mexico and Zambia were also more likely than their Scottish counterparts to receive complaints about alcohol problems and to discuss their problems with more people. In general there was greater emphasis on formal responses in Scotland, but at the same time more pessimism among Scottish respondents about what can be done to deal with alcohol problems than in the Mexican or Zambian samples.

Thus, on the basis of a comparison of the findings from the general population survey in the three countries, it appears as if there are indeed substantial differences between the countries in alcohol consumption patterns, in attitudes toward alcohol, and in problems and responses. Such differences are also confirmed in comparing the statistics obtained from the background information study.

The implication of this conclusion is similar to the implication of the conclusion about differences within countries. Namely, a solution to alcohol-related problems that may be successful in one country may be completely irrelevant, if not destructive in another.

Striking Similarities

On the other hand, one should not conclude that no solutions are transferable from country to country or from community to community. This is particularly so, when one considers the fact that there were many striking similarities between the communities and countries as well.

For example, in all samples, men were more likely than women to report that they drink, drink frequently, get drunk, are more tolerant of drunkenness, and have experienced problems associated with drinking. There was little difference in attitudes toward treatment by men and women in all samples. Sociability and celebration were generally endorsed reasons for drinking and cost, health and work were most often cited as reasons for not drinking or being careful about drinking. Norms regarding drinking behavior were most restrictive for women and young people in all settings, and there was less tolerance for drunkenness than for drinking. There was also less of a difference in the ways men and women viewed alcohol than in their drinking practices, which is suggestive of the well-known discontinuity

between attitudes and behavior. In all three countries, there appeared to be substantial involvement of alcohol in incidents seen by the police, and tolerance for drinking and drunkenness seemed to be greatest at parties, in bars, or at home. Least tolerance for drinking was shown in the driving situation.

Such similarities suggest that there may be a number of elements in an improved response to alcohol problems that will be common to many communities and nations. For instance, the finding that motivations for drinking or not drinking appear to be similar in all settings suggests that approaches appealing to motivations may have a common theoretical basis and may be able to draw from one another. Similarly, the importance of the police in all settings suggests that efforts directed at improving police response to alcohol problems might be profitable in most communities and countries, and that such efforts might borrow from one another.

OTHER CONCLUSIONS

A number of other conclusions with possible implications for further action or research can be drawn from comparison of the findings.

One is that the relationship between consumption of alcohol and problems appears to be more complicated than anticipated. There were in fact considerable differences between the various samples in the patterns of relationship of a frequency/quantity measure of consumption to the number of reported personal or social consequences of drinking. Specifically, in the Zambian sample, there appeared to be very little connection between the pattern of drinking and either personal or social problems whereas there was a strong correlation among Scottish respondents and a moderate correlation among Mexican respondents. The implication of these findings is that one cannot assume that changing a pattern of consumption will automatically have the same effect on reducing alcohol problems in all cultural contexts.

Another similar conclusion is that per capita consumption data can be misleading unless they are taken within the context of known prevalence of abstinence and the prevailing pattern of drinking. That is, "all or none" drinking in Zambia and Mexico appear to give rise to high levels of problems among those who drink, whereas in Scotland drinking is a near-universal pursuit, but most of it is moderate and apparently problem free. If the large number of abstainers in Zambia and Mexico started to drink in an "all or none" way, the problem levels reached could be phenomenal. This poses crucial questions for educators: What kind of alcohol education is appropriate in a country where half the population is abstinent? Is it possible to break the association between drinking and drunkenness? If no alcohol education is given, marketing and advertising will fill the vacuum--should controls be imposed on such developments?

As noted above, women abstained or drank less than men in all the communities studied. They were also much less tolerant of female drinking than were men. As also noted, in Zambia and Mexico sex was much the most important determinant in drinking behavior, whereas in Scotland age was a crucial factor and it was only there that the heaviest drinking occurred among young adults. There was also much more tolerance of youthful drinking in Scotland. The drinking habits of younger Scottish women have changed rapidly. The role model for the next generation will be a drinking mother. It seems reasonable to assume that this change will thereby become established for the future, and it is interesting to speculate what the consequences would be of similar changes throughout the world.

In each area, the family was the battleground in which most alcohol-related problems were fought out. It may be that the conflict is most acute where abstinence is the rule among women. Certainly women in Mexican communities revealed a high level of anxiety and anger about their husband's drinking. In no community did men commonly drink with their wives, and in all three national settings there was a historical tradition of separating, at times by legislation, male from female drinkers. We do not know whether this sexual disjunction in drinking is more or less harmful--cases could be drawn up on either side. It is, however, the kind of issue that is susceptible to change, for instance by the design of drinking places.

Scots seem to have been largely won over to the view that specialist "treatment" is required for alcohol problems, a view not necessarily shared by the specialist agencies themselves. In Mexico and Zambia (where almost no specialist services exist) a much wider range of helpers were mentioned, with the church and native healers having quite prominent positions. The Lothian sample also seemed remarkably reticent in talking with anyone about their drinking problems, whereas the Mexican men and Zambians had spoken much more freely, usually with their families. This greater openness would be a potent force in strengthening informal community responses.

As mentioned, rural/urban differences were more evident in Zambia and Mexico than in Scotland. Contrary to the recent experiences of European countries with strong temperance traditions, however, in both Mexican and Zambian samples, rural men drank and got drunk more often than they did in the towns. In rural Zambia, the men were much more tolerant of others' drinking. (It may well be that they would prove more tolerant about many other aspects of life.) More alcohol problems were reported by residents in the rural communities in Mexico than in the urban, while in Zambia more problems were reported in the periurban community than in the rural, in spite of reported heavier consumption and more frequent drunkenness in the rural area. Thus, the hypothesis that urbanization leads to alcohol problems is not supported by our data. The relationship seems to be quite a complex one, which requires further study. It is also possible that the discrepancy in findings between Mexico and Zambia may be due to greater availability of commercially produced beverages in the Mexican rural community than in the Zambian, and possibly a greater breakdown of integrated drinking practices in the former than in the latter. If this is in fact the case, it suggests the need for a careful examination of the policies that promote availability of commercially produced beverages in both Mexico and Zambia as well as other countries.

The findings also make it clear that in each country the responsibility for the community response to alcohol problems rests on a wide range of agencies. In fact, specialized agencies even in Scotland appear to deal with only a small fraction of the variety of alcohol problems confronted by the community. Some of these agencies recognize this responsibility, while others at present do not see it as having anything to do with them. There is also marked contrast in the level of optimism among these agencies, with the Scots being pessimistic about the value of intervention from anyone other than a specialist service, and the Mexicans having a generally optimistic view of the value of treatment. Zambians, more than inhabitants of the other countries, recognize the importance of relatives, bystanders, and other helpers in reacting to alcohol problems in their midst, whereas there was a tendency in Scotland to move quickly to an institutional response. Perhaps developed countries could derive a clue for action from the less developed countries in this regard.

A further clue to action might derive from the comparison of the various populations of drinkers in the three countries (i.e., heavier drinkers in general population vs. clinical samples). Although little difference was found between the reasons offered for drinking in the samples of drinkers, those in the general population sample in all three countries were more likely than others to stress reasons for not drinking. It is possible that this response might act as a buffer against the development of alcohol-related problems. Thus, in all three countries an attempt might be made to examine how this attitude could be encouraged in high-risk groups.

Finally, a conclusion that has recently emerged out of the cross-national analysis and that is discussed in detail in Roizen et al. (unpublished) is that the "so called" alcohol dependence syndrome may not be universal. Evidence for this conclusion comes from the finding that the intercorrelations between the various symptoms thought to comprise the syndrome were low and produced only weak principal factors (with possible exception in the Mexican sample). On the other hand, however, some strong patterning in symptom distributions was found between the various samples, suggesting there might in fact be a common structure of symptoms of alcohol dependence that cuts across cultural boundaries. If nothing else, these findings direct our attention to the importance of understanding the cultural context of alcohol in interpreting alcohol problems and responses to them. The cross-cultural analysis provides many other examples to support this point.

Thus, to conclude this section, a comparative analysis of the project's findings certainly suggests some profitable lessons that might be applied in other communities and countries. The same is true of a comparison of the experiences of the collaborators in the three participating countries in carrying out the project.

CONCLUSIONS FROM COMPARISON OF EXPERIENCES

Feasibility and Desirability of the Community Response Project

One obvious conclusion that emerges from considering their experiences is that, in spite of the difficulties encountered, it was in fact possible for the collaborators to carry out an ambitious project such as the one described in this report. Such a project is thus feasible even in difficult circumstances, although appropriate adaptations are certainly needed.

It is also obvious that while it is difficult to disentangle the effects of other factors in the environment from the effects of the project itself, the collaborators accomplished a great deal with limited resources: they stimulated many activities, they involved large numbers of people, they built networks for further collaboration, they produced materials that could be used elsewhere, and they increased our knowledge about the process of developing appropriate responses to alcohol-related problems

Lessons Learned

The project has shown that the process of improving responses is both long term and complex. As noted in part II, none of the teams consider their efforts to be completed, and there are plans to continue the process in all three of the countries. It is also clear that the process of developing responses to alcohol-related problems is an inherently political one, which requires sensitivity and understanding of the many factors that enter into political processes.

It has become clear also that there is a wide range of possible responses to alcohol problems by communities. As described in part II, the approaches included educational drama, information campaigns, training community workers, establishment of new facilities, and measures to regulate consumption. However, it appeared that community interventions were most likely to be successful if they included both regulatory and educational approaches and focused on reducing the specific problems associated with alcohol. In addition, having a group for coordination at local and national levels seemed to be very useful.

A conclusion that was reinforced during the second phase of the project was that action at local levels cannot be understood in isolation from action at other levels. This became particularly clear in Zambia where the overall goverment policy of integrating former local administrative structures and the party organization had major implications for the establishment and the functioning of community action groups in the local communities. Similarly, it could be seen that national policies and approaches in Mexico affected the ways in which community development activities took place in the study community there.

In all three countries it became clear that the nature of the relationship between the project team and the communities was extremely important in understanding what occurred. For instance, the ongoing relationship of the Scottish team to existing community organizations and structures made it much easier for that team to integrate the results of the first phase of the project into the community action plans. In the other two countries, on the other hand, the teams had to invest considerable effort in establishing and sustaining effective working relationships with the communities. This involved them, particularly in Zambia, in trying to walk a fine line between directive and nondirective approaches, a difficulty that is described in detail in the Zambian final report (Rootman 1983, appendix II).

Another conclusion from the Zambian experience, apparent also in the other two countries, was that research data are not neutral. This is to say, not only can they be interpreted in various ways by members of the community, depending on members' particular interests, but they can serve both political and organizational ends. In spite of this tendency for people to interpret the research in their own ways, however, the collaborators generally felt that the experience of the project confirmed their feelings that research, particularly action research, can be an extremely powerful tool in helping communities and countries deal with alcohol-related problems and other kinds of problems that they face.

Suggestions for Other Communities and Countries

On the basis of the experiences in the three countries, the collaborators suggest that the following elements would be among the most important for communities and nations to consider in improving their responses to alcohol-related problems.

- Establishment of a coordinating mechanism for collating and monitoring information on the range and extent of alcohol problems and current responses to them, for obtaining new information, and for developing relevant policies and programs. At both community and national levels, such a mechanism would imply the involvement of persons and bodies with a variety of skills, interests, and levels of influence.

- Development of preventive measures, which are likely to include both controls on the availability of alcoholic beverages and education aimed at reducing demand for them.

- Development of measures aimed at minimizing harmful consequences of alcohol consumption. These would include attempts to reduce the health and social consequences not only for the individual drinker, but also for the drinker's family and fellow workers and the broader community.

- Development of community-based action research projects such as the one described here. Such projects should, however, be adapted to suit local purposes and requirements. Some considerations in doing so will be discussed in the next chapter as well as in the guidelines. (Rootman and Moser 1984).

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CHAPTER 7

ASSESSMENT AND FUTURE OF THE PROJECT

ASSESSMENT OF PHASE I

Types of Assessment Attempted and Implications for Action

The overall objectives for the first phase of this project, as set out in chapter 1, were to increase knowledge and awareness of drinking patterns and the nature and extent of alcohol-related problems and community responses to them in selected areas of the world with very different socioeconomic situations; and to promote more adequate responses to alcohol-related problems at local and national levels.

An assessment of how far these objectives have been achieved will be made by considering several interlinked aspects of the question. First, to what extent was it possible to interest and collaborate with authorities and project teams in parts of the world showing sufficient differences for the experience and results to be of wide significance? Then, how far was it possible to devise and apply methods of obtaining and analyzing information that appeared to be applicable in the various project areas, and how far, in fact, were the project teams able to apply them and to obtain reliable findings? Next, what new information was obtained through the methods used, and was it sufficient as a basis for planning more adequate responses to alcohol-related problems? Was it possible in each area to arouse interest in and devise a mechanism for planning more adequate responses? One further important question relates to the effect of this part of the project in raising the level of awareness among the project teams and local and national authorities, as well as persons in other countries, concerning alcohol problems and the need to plan more adequate responses. An aspect that should not be forgotten refers to the cost of such a project in terms of personnel and finances, and whether commensurate returns can be expected.

Adequacy of Selection of the Project Areas

As mentioned in chapter 1, the three countries that accepted the invitation to collaborate in the project responded to the selection criteria originally suggested.

The fact that the first phase of the project could be brought to a successful conclusion in these countries and that they participated enthusiastically in the second phase suggests that these criteria were useful. Thus, in future projects of this nature, it would seem desirable that governments acknowledge their concern about alcohol problems and be willing to commit some of their own resources to their investigation and that at least the nucleus of a local research team be available.

With regard to the selection of communities to focus on, however, there was some feeling in retrospect that other communities might have been chosen instead of, or in addition to the ones that were included. In Zambia, for instance, it was considered that a more settled community, with a higher percentage of persons in the upper educational and income levels--among whom it is believed there may be serious, but not well-recognized alcohol problems--

should have been included as had been initially planned. In addition, the rural area in Zambia, although not far from the city, was inaccessible for part of the year because of floods, and shortage of transport made access difficult at other times. In Scotland, it was felt that the rural area chosen was not the optimal choice because, on the whole, residents used the same services as those provided for the capital city and, in fact, many commuted there for work. It has been suggested that it would be worthwhile to carry out future projects in a more distant rural area, particularly one with the specific problems associated with a high percentage of the working population employed in the alcohol trade. In Mexico, it was concluded that it would have been desirable to include a periurban "shantytown" area, and in one of the more distant areas where, for instance, medical students spend a 2-year period of special service. Such a project would be valuable for consideration not only of problems existing in rural areas, but also of the changes occurring in drinking habits with the rural exodus to the city. This would be particularly useful since the project in Mexico, as well as some earlier studies, indicates that in Latin America alcohol problems are more serious in rural than in urban areas, and further investigation is needed of the underlying reasons and possible solutions. Such projects have in fact since been initated in Mexico.

In spite of some second thoughts about the choice of communities, however, the criteria for selection noted in chapter 2 were considered to have been relevant, given the purposes of the project. It should be stressed, though, that if the main purpose of the project is simply to provide a basis for local action, excessive concern about site selection is hardly justified. If, on the other hand, the main purpose is to provide a basis for national or international action, greater concern for site selection is desirable to ensure at least that the communities are not grossly atypical and that they represent a range of settings.

It should also be pointed out in this context that the catchment areas for the various studies were sometimes different. For example, the boundaries of the general population surveys sometimes differed from the catchment areas served by the agencies studied. While the collaborators struggled with the problem and its implications for the integrity of the concept of community response, no completely satisfactory solution was found. It was in the end simply conceded that the definition of "community" might have to vary depending on the circumstances.

Adequacy of Involvement of Authorities and Project Teams

In each of the countries, substantial involvement was sought and received from the national health authorities. This included written approval for collaboration in the WHO project and promise of support to the project team. In the event, the WHO support for the studies was supplemented in each area. This was considered exceedingly important from the point of view of requirements for following up the proposals deriving from the project. In fact, the support for the interest in the project on the part of national authorities has continued in each of the countries concerned.

Some additional support became available from local authorities, universities, and even outside institutions willing to provide training and advice in specific aspects of the research. In future, it may be important for a local team to spend considerable initial effort in specifying and seeking the type of financial, personnel, and administrative support required for such an undertaking. Where local resources are called upon, there can probably be greater expectation of utilization of the findings.

Since WHO works primarily with and through national health authorities, there was little attempt at direct involvement of other governmental sectors. Some countries, however, already deal with alcohol problems through committees coordinating the interest and activities of a variety of ministerial, academic, voluntary, and other bodies. Some additional involvement on the part of such institutions might be solicited earlier in the development of similar projects.

Serious difficulties arose in each of the countries--as well as internationally--in recruiting and funding adequate staff for a sufficient proportion of their time and for a long enough period to carry out the first phase of the project. Because of the interest and enthusiasm of the collaborators, the major obstacles were overcome, but the personnel resource aspect should not be underestimated when embarking on similar further work.

Adequacy of Arrangements for Collaborative Development of the Project

When proposals were first put forward for funding the project, provision was included for a "working group meeting" about every 6 months, comprising investigators from each of the countries, together with advisers and WHO staff. This provided an invaluable means of developing the project and ensuring that all the participants collaborated in the major design decisions. The relatively high costs of international travel usually precluded bringing together more than one or two of the persons closely involved with the work in each country, but this drawback was to some extent overcome by ensuring from the beginning that each country would host one of the meetings. This arrangement had the additional advantages of arousing the level of interest and, one hopes, commitment in each of the countries, through meetings with top-level national administrators, research, clinical and care-provision personnel in the same and allied fields, and sometimes with public information specialists. It also led to a better understanding by the working group of the need to adapt instruments and methods to specific local circumstances and requirements. There was, however, some feeling that there was not enough time available at any of the meetings to reach complete agreement. The circulation of full reports of the meetings permitted specific points to be approved or further discussed by correspondence. More frequent meetings of the full working group would not have been feasible because of cost and overloading of the collaborators, but when necessary, parts of the project were discussed in smaller meetings in which each of the advisers played a specific role. Coordination of the work and understanding and application of the methods agreed upon were facilitated by visits to the project teams by the WHO project managers. Such visits also helped to increase national and local interest in the project.

Considerable attention was given to setting explicit goals and to monitoring progress, particularly in the early stages of the project. The procedures developed for doing so appeared to help collaborators develop the work in a systematic and coordinated fashion. Monthly, interim, and other types of reports distributed regularly to collaborators and advisers helped maintain a level of knowledge about what was happening in other centers, which made participants fully conversant with major events and decisions.

It is probable that, if further countries undertake similar work, there will be much less need for the heavy financial and personnel expenditure on meetings, especially in view of the proposal to develop regional networks involving collaboration between neighboring countries. One complication that is likely to remain, however, is the changing of staff within the project teams. Means of ensuring continuity of the work will need to be developed both locally and internationally.

Adequacy of Study Methods and Information Obtained by Their Application

As the studies proceeded, it became clear that the multiple approach to looking at alcohol use, problems, and responses to them, as described in chapter 2, was very necessary but that, in retrospect, perhaps the methods proposed were too ambitious given the resources and time available. This resulted in the need to make compromises in study design, and it was impossible to do as much pretesting of instruments as was desirable. It was also necessary to accept less than optimal sample sizes and sampling design in certain substudies. In addition, as collaborators carried out their work, they became aware of defects in the design and instruments that should be changed for future work. The proposed amendments are reflected in guidelines for a community response-type project, which will be made available to interested countries (Rootman and Moser 1983). Detailed suggestions and criticisms will therefore not be presented here, but only some general comments about each of the substudies.

With regard to the background information study, it was felt that a conscious attempt to obtain background information about alcohol at both local and national levels was an extremely fruitful preliminary and could readily be adapted in any country. It quickly revealed important gaps in information and highlighted ways in which information was being collected in an unhelpful way. There was some sentiment, however, that, while the information collected was generally useful, it was not focused sufficiently toward the specific requirements of the project. It might have been preferable to concentrate greater effort on collecting the alcohol-specific information (e.g., number of outlets). Nevertheless, for any country

contemplating an improved response to alcohol, time spent in elucidating what is already known is very much worthwhile and should be adequately supported.

The major investment of resources, personnel, time, and energy in this project was devoted to developing three near-identical general population surveys in the communities. In retrospect, it may have been unwise to invest so many of the project resources in this approach as the other parts of the study, and the opportunity to develop community plans was, as a consequence, relatively impoverished. As suggested in chapter 6, it does nonetheless represent a unique data set, and cross-national surveys are one of the few ways of providing information that can be compared with reasonable confidence. It is also clear that the methodology of survey research is much better developed in industrialized societies than it is in other parts of the world and, as the study progressed, the collaborators became increasingly aware of the complexity involved in sharing research method and design across national and cultural boundaries.

Comparability of the research methods was a major issue. Back-translation and careful pretesting helped to overcome some of the more obvious difficulties in trying to reach an equivalence between centers in the questions asked. Comparability also had to be achieved in coding, data production, and analysis. This would not have been achieved without the involvement of the project managers, an essential post for a venture of this kind.

The problems of sampling in three different countries have been discussed in earlier sections. It was often difficult to identify the detailed composition of the population to be studied. The interviewers employed were varied in their training, age, sex, and skill. For example, in Scotland a professional interviewing agency was employed and most of their interviewers were middle-aged women, which contrasted with the "army" of young men dressed in a common uniform who conducted the interviews in rural Zambia. The interviews in Mexico were often a public occasion, with the rest of the household looking on, whereas in Scotland they were usually conducted in private. Such variables must have had an impact on the responses obtained.

The areas studied could not pretend to be representative of the countries. In particular, upper-social-class groups in Zambia and in Mexico were underrepresented. Although they form a very small group, their absence may be important in view of the belief that the elite are often heavy drinkers and represent an important role model for others. It is noteworthy that all the communities sampled did not tolerate much drinking by their leaders. For instance, 62 percent of Zambians favored no drinking for a public figure.

In spite of these problems, the general population survey provided some of the most substantial and interesting results of all the studies. It may, however, be desirable to modify the instruments or develop a shorter version for use in other countries.

The agency study proved very useful in helping to develop a community response and is a cheap but effective means of quickly gleaning the view of key informants who have a knowledge of the health and social systems in the area studied. Its most important shortcoming is its value as a basis for generalization. A key informant may not represent his or her community but simply perpetuate prevailing myths, and some means of checking the agencies' perceptions against reality seems essential. The agency data did not provide a good basis for comparative studies because the institutional frameworks differed markedly and the samples drawn were small and somewhat idiosyncratic. As a basis for local action, the detailed experience of selected front-line workers was, of course, invaluable.

The client studies presented formidable difficulties because of the different organizational patterns of the agencies studied. They were also deficient regarding number of cases obtained. This was due partly to lack of resources but also to the procedures used in the study agencies and the criteria of screening. Nevertheless, if thought of as pilot studies, they were quite revealing and they should be regarded as exemplary of what might be done rather than as definitive in their own right.

Had there been more time and resources available, complementary studies would have been helpful in obtaining a clearer picture of the situation in each area. The lack of opportunity to carry out observational studies was particularly regretted.

Adequacy of the Information Obtained

Broad, General, and Alcohol-Related Information

It was considered exceedingly important first to collect information fairly readily available, at local and national levels, on general characteristics and on those particularly related to alcohol. For the national level, sufficient data on the general characteristics have now become available for most countries in the 1980 edition of the World Health Situation (WHO 1980). The range of data concerning alcohol, however, is still largely unavailable for most countries, although some were compiled in the form of national profiles for 29 countries in connection with the WHO project on prevention of alcohol-related problems (Moser 1980). This material could now well be used as a basis for starting on community response studies in additional countries. Regarding the data at the community level, it was expected that their compilation would fulfill three important objectives. One was to provide the research team with an opportunity to get to know the local conditions and problems and to recruit a team of persons from within the community who would be willing to assist with special aspects of the project from the beginning. The second was to get such a "community alcohol problems team" to work early on such a compilation, which an outsider could not perhaps so easily manage to do. The third was, of course, to gather together the easily available information before setting in motion any special means of obtaining it.

For several reasons, there seemed to be difficulties in getting the alcohol information at the local level. Many existing statistics do not apply to the "community" level; the project teams were perhaps not able in all cases to go to the communities sufficiently early or often to start gathering the information themselves. There seemed to be great difficulties (e.g., commuting difficulties, lack of time, work overload) in setting up local teams to assist with the project, except perhaps in Scotland, where there was already a precedent for such an endeavor, in which the chief investigator was already involved. In the future, it may be possible to give greater attention to securing the interest and help of, for example, a community development center, or various local committees in such work. If the "community" selected is to do anything with the findings from the local studies, it would seem important for representatives to be involved in obtaining the material from early on.

It was evident, particularly in Zambia and Mexico, that before the study started very little information had ever been brought together about alcohol availability and drinking habits that could have been used as a basis for policy making or planning. Even on a national level, although these two countries were able to provide statistics on commercial production, imports and exports, it became obvious that an attempt had to be made to estimate the quantities produced but not recorded. In the case of Scotland, it was not possible from the quantities of alcoholic beverages recorded as available in the United Kingdom to separate out those available for Scotland. When it came to considering the communities, estimations of available quantities per head became even more difficult to obtain. In the future, ways might be devised for getting improved estimates so as to keep track of changes in amounts available. It should, for example, be possible to estimate the quantities of commercial beverages entering the study areas in Zambia and Mexico through tracing amounts delivered to the known outlets, and local investigators could perhaps at least provide some rough estimates of amounts produced at home. Theoretically, this should be possible also for Scotland, although it would entail a time-consuming study of available statistics.

A way of looking at changes in amounts available is to trace changes in numbers of outlets, taking account, of course, of their size and turnover. This was, in fact, done--but only partially--for Lusaka, but not for the smaller areas in Zambia. Changes in numbers of outlets for known populations can be helpful in explaining changes in drinking habits, as has been clearly shown in Finland (Virtanen 1977).

Information on Drinking Habits

In each country, some historical information was available about which people drank where and on what occasions, but this was largely anecdotal. In Scotland, however, an important Scottish sample survey had been carried out that gave information on drinking patterns but not on alcohol-related harm. A few studies had been made in Mexico, giving very

different pictures. Very little was known of the Zambian situation. A general population sample survey seemed, then, to be an important means of getting at such data and as this report makes quite clear, proved to be extremely valuable.

Whether the actual questionnaire used, however, was the best means of obtaining this information is uncertain. It might have been shorter. The use of open-ended questions might have elicited much valuable information, but this would have been difficult to quantify. Perhaps a better balance between the two types of questions might be achieved in future work.

There is also some doubt about whether a general population survey yields valid information on drinking practices. A Canadian study, comparing respondents' figures with quantities sold over a period of time, showed that the former probably gave a gross underestimate of quantities drunk (Pernanen 1972). Moreover, there was little previous knowledge of the use of questionnaires among respondents in Mexico and Zambia and this too may have resulted in inaccurate responses. It would be worthwhile in such areas to try out other methods, such as key informant surveys, and to compare the results. Some initial work along these lines was in fact done in Mexico and obtained roughly comparable results.

In order to augment the kind of information obtainable by the survey questionnaire, information was obtained from specific agents and agencies. It was not possible to obtain representative samples either of these bodies or of their case loads, so that the results can be considered only as showing some possible general trends, which would require further investigation. Among important topics for future studies would be drinking among young people, which might be carried out through questionnaires in schools, through discussions with school staff, and through investigation among other agencies dealing with youthful populations, particularly in areas where the percentage attending school is not high. For the somewhat older youth, army recruits might well be studied. Some attempts were in fact made to adapt the instruments to school populations in Zambia and are currently under way in Mexico.

Information on Attitudes

As reflected in this report, much useful information on people's views was obtained through the general population survey as well as the agent/agency study and client studies. As was the case with the survey data on drinking practices, however, there is reason to wonder about the validity of this information. According to one author, attitudinal data obtained by surveys in developing countries are least accessible to survey methodology and least comparable cross-culturally (Van den Berghe 1973). On the other hand, consistencies in responses to attitudinal questions within the countries and striking similarities between countries suggest that at least a large part of the information is meaningful. Its validity, however, cannot be definitively demonstrated and it should therefore be interpreted cautiously.

In attempting to improve this type of information in future work, it might be helpful to use more open-ended questions with systematic probing, even though this would increase the difficulty of doing quantitative analyses. It might also be desirable to supplement the attitudinal information obtained through the surveys by observational and other approaches.

Information on Drinking Problems.

The data collected from the background information on Scottish hospital admissions and mortality data for alcohol-related disorders give much higher ratios than for the United Kingdom, which could be expected from the apparently much higher levels of consumption. For the other two countries, however, there could be no such comparison, in view of the dearth of treatment facilities. An exception is liver cirrhosis in Mexico, which appears to have a very high rate in one region, mainly because a specialized center concerned with liver diseases exists there. There thus seems to be a need to improve statistical reporting systems in developing countries on the consequences of alcohol use. In the meantime, it is clear from this project that population surveys including, perhaps, key informant surveys, as well as special studies of clients of treatment facilities, can provide much useful information.

With regard to the data on problems from the general population survey and the client studies, while they proved to be very useful and interesting, some of the questions may have been too unspecific, as they evoked a surprisingly high frequency of answers from the general sample. Feeling the need to "cut down" or "stop drinking," for example, is either too sensitive a measure of problem drinking, or a question that involves value judgement and evokes a socially desirable answer. The self-reports on experiences of symptoms of "alcohol dependence," such as hand tremors, blackouts, or early morning drinking, were so common in some samples (e.g. Mexican men) that it is uncertain whether the questions were understood in the sense in which they were intended. Thus, in future projects of this nature, there is a need to reexamine these questions and perhaps reformulate some of them. It may be necessary to substitute others such as "have you received, or are you receiving treatment for alcoholism?," which may permit the calculation of a rate of treated and untreated cases. It might also be worthwhile to inquire about the choice of particular drinking occasions leading to the occurrence of a problem.

As for specific alcohol-related problems, three that perhaps deserve more attention than they received in the project were traffic accidents, family problems, and problems in the employment setting.

Although the general population survey did not find large proporations admitting involvement in road accidents while drinking, self-reports are probably not the best way to study such problems. It would be desirable to conduct further investigations in this field, especially in developing countries, where road traffic is increasing rapidly.

Little information was obtained from any of the countries by any of the methods about family difficulties and family breakdown resulting from alcohol use. In Scotland, it appeared that social workers, while well aware of such problems, tended to push them into the background through lack of ability to deal with them. This may be a very important field for further studies, which might also consider possibilities and effectiveness of intervention.

Little attention was given to drinking problems related to the employment setting, apart from some detail in the Scottish background information, one rather imprecise report from Zambia, and a few questions in the general population survey. Although this is, perhaps, less relevant in Mexico and Zambia at present, it may assume much greater future importance. In Scotland, the limited information points to a need to study alcohol problems, particularly among those engaged in the production and sale of alcoholic beverages, and in certain other employment settings such as among shipbuilders and dock workers, especially as there is some relatively good evidence of possibilities of reducing alcohol problems in the work environment.

Information on the Community Response

Data on community responses were obtained from all the data collection approaches used and proved to be particularly helpful in developing recommendations for improving community responses. It is therefore strongly recommended that in future projects such information should be collected and, if possible, enhanced. One way of doing the latter would be through the use of observational approaches. It may also be worthwhile to carry out content analyses of media coverage of alcohol problems.

Information on Changing Trends

The material collected in all three countries is mostly to do with the present, but there are nevertheless interesting pointers to changing trends. A particularly important trend to follow up is change in the sociocultural and economic situation. Commercialization of production of alcoholic beverages, increasing employment in industry, and increasing wages have combined to make alcoholic beverages much more easily available than in the past in many areas. More widespread problems can therefore be expected. In Zambia, adequate evidence is lacking, but it is clear that efforts to prevent home production are strongly resisted partly, perhaps, because of the higher price of commercially produced beverages. If roads are extended and transportation facilities increased, the effects of possibly increased alcohol consumption will need to be watched.

Overall Validity of Findings

It was possible to approach the question of validity from a number of different viewpoints. First, there is evidence from other similar studies in the countries concerned. In Scotland there was a body of survey data with which the present local study could be compared and which showed that the broad trends observed in both were very similar. In the other countries, the reliance was more on ethnographic information but, again, there was considerable concordance between these data and the findings of the present project. The social statistics, which were obtained in the study of the background information, also provided some clues as to the patterns of alcohol use and problems in each community. An example is the matter of beverage choice--beer predominates in all three countries--where the background data seemed in most cases to strengthen the validity of the general population survey findings. It was also possible to compare the perspectives of the three parts of the study--the general population, the agency and the clients--where again there was a concordance of views. Finally, tests of internal consistency were conducted on the general population survey data of all three countries and again confirmed the consistency of the answers obtained.

A more detailed discussion of the validity and reliability of the data collected is contained in the cross-cultural analysis of the data (Roizen et al., unpublished).

Adequacy of Data Analysis

Local Data Analysis

A decision was made quite early on to carry out the analysis of data within the collaborating countries, rather than at some central point. Among the advantages of the former alternative was expected to be the greater applicability of the findings to the local situation and to processes of action planning. Moreover, it was envisaged that local research teams would, where necessary, devise means of data analysis that were suitable to local conditions and within the possible constraints of available technology. While, on balance, this was a wise decision and would be recommended for future projects, it did pose some difficulties.

For instance, in both Zambia and Mexico it was found that, because of the complex nature of the project and the large amount of data collected, it was difficult to find adequate data processing facilities or to use less sophisticated methods of analysis. This resulted in delays, extra expenses and frustrations for the collaborators. In retrospect, it was considered that more thought should have been given at an early stage to the data processing requirements of the project design. This would perhaps have led to the preparation of shorter research instruments and the resulting data could have been processed adequately using simpler technology. In future, greater attention should be given to these issues and the use of alternative data processing technologies such as microcomputers should be explored.

It was realized, in retrospect, that the collaborators should have been given more external technical assistance in data analysis than they received. The few visits arranged for collaborators to centers experienced in data analysis proved to be extremely helpful, and such visits would be recommended for future projects. It might also have been desirable for the project manager and for advisers to spend more time in the centers, working with the collaborators on data analysis.

Although guidelines were produced to help with data analysis and did, in fact, prove to be of some value, they led to some problems as well. Some collaborators felt unduly constrained by the guidelines and thought that they might have been more innovative in their analysis had they been left to their own devices. The guidelines were also, in some cases, misinterpreted. In future projects, it would be important to simplify the guidelines and to provide some help in interpreting them. It should also be made very clear that collaborators not wishing to be restrained by such guidelines should either disregard them or use them selectively.

For analysis of data, it would have been helpful if an attempt had been made earlier on to make the hypotheses more explicit. This should be easier to do now that the project has been completed in three settings and would be highly recommended for future projects.

Central Cross-Cultural Analysis

It became increasingly obvious that it would be extremely difficult to make cross-cultural analyses by simply drawing on the country analyses, because of different coding conventions, different timetables of analysis, and different ways of presenting data. It was therefore decided that the cross-cultural analyses should be done at some central point, and arrangements were made for the Alcohol Research Group at Berkeley to undertake this. While this was satisfactory in most respects, in that the Alcohol Research Group took their responsibilities extremely seriously and carried out the analyses very rapidly and with considerable innovation, it did have some drawbacks. For one thing, it meant that persons engaged in drafting the international report did not have easy access to missing statistical information. For another, it meant that they could not be involved in the day-to-day decisions as to what analyses should be carried out. Finally, there were some inevitable differences in perspectives on the analysis and on the project. None of these problems were insuperable but, on balance, it would be preferable in future projects for central analysis of cross-cultural data, if required, to be done in much closer collaboration with WHO staff.

Further Data Analysis

In general, with regard to data analysis, it is considered that a great deal more could be done with the data collected in phase I, both within and across countries. There simply was not enough time to carry out all of the desired analyses. The data collected constituted a veritable gold mine of information and should be more fully exploited. It would be worthwhile, for example, using multivariate techniques, to examine further the explanatory power of variables covered in the population survey, such as household size and composition, geographic mobility, occupational stability, health state, parental role models, and normative permissiveness. In addition, it might be desirable to analyze the data further with a view to identifying the frequency and distribution of cases in need of invervention and the subgroups of the population which present the highest risks. It is the intention of the collaborators to do such analyses and in fact they are currently under way.

Adequacy of Planning and Development of Improved Responses to Alcohol-Related Problems

Community Collaboration in Planning Responses

There was some feeling among the collaborators and advisers that the community planning activities during phase I did not progress as originally expected. It had been hoped that the research teams would work continuously with concerned members of the community. Community members were expected to participate actively in aspects of the research, particularly in the collection of background information, to receive and give feedback to the research team as the project progressed, and to be continuously involved in the development of community plans. Although these expectations were fulfilled to some extent, as the project progressed, the study teams found it increasingly difficult to maintain continuous contact with the study communities and, in fact, in some instances, relations were disrupted for considerable periods of time. Once the research was completed, the teams renewed contacts during phase II.

The question remains, however, whether the original model of how the team should work with the community is a viable one. It may be argued that it is not, because the demands of doing the research itself are too great, and because the research team has little to offer the community until the findings are available. On the other hand, it may not be impossible to carry out both research and community development at the same time to the mutual benefit of both types of activities, as occurred with respect to the Scottish project, and a project

carried out by Kelso in Alaska. Perhaps lack of experience in community work among the project teams and the lack of sufficient resources led to the failure to fulfill original expectations. A further and compelling reason was that the need to develop objectives, methods, and instruments for an exceedingly complex and new type of action research project, and to carry it out in three countries within a limited period of time, laid a very heavy burden on the small project teams. Thus, it may be that the original model should not as yet be abandoned but be held as an ideal toward which teams might strive in the future.

Usefulness of Research Findings for Planning Needs

Another self-criticism of the project is the extent to which the research reflected the real information needs of planners. It was suggested that perhaps the collaborators and advisers were too academic in their interest and that the resulting research instruments reflected this kind of orientation. It was agreed that, in the future, in the amendment of the research tools, a greater effort should be made to solicit the views of the people actually required to make the plans and decisions for improving responses to alcohol-related problems.

On the other hand, the interest and commitment of governments in the participating countries to the project and its implications has been considerable. All three countries agreed to sponsor national-level meetings to consider the results of the research; in one country an interdepartmental committee at the highest level was set up to deal with alcohol problems as a result of the research; in another, responsibility for the project was taken over by the national government; and in all three, considerable national resources were committed to the project. It is therefore expected that the research will continue to have implications for action in the three participating countries.

ASSESSMENT OF PHASE II

The following major types of national and international activities were carried out during phase II to satisfy the objectives and requirements for that phase: 1) development of model guidelines; 2) development of monitoring protocol; 3) monitoring implementation of actions in participating countries; 4) attempts to improve responses at local levels; 5) attempts to improve responses at national levels; 6) organizing and participating in international meetings; 7) liaison with governments, investigators, and others. Each of these activities will be assessed briefly in turn, followed by an overall assessment of phase II.

Assessment of Model Guidelines

As noted above, one of the main objectives of the second phase of the project was "to develop general guidelines and procedures for the application of the methodology for community analysis and planning developed in the current collaborative project to other interested countries." The achievement of this objective is reflected in the guidelines published by WHO (Rootman and Moser 1983).

A review of these guidelines indicates they are comprehensive in nature, dealing with both research and action and the relationship between the two. They contain experiences and materials from sources other than the community response project and may therefore provide a somewhat idealized picture of the process of developing a community-response-type project and one that not all of the collaborators may be in complete agreement with.

One of the collaborators, for instance, suggested that the guidelines give insufficient emphasis to the general population survey and perhaps give too much emphasis to other approaches, such as observational studies and the use of key informants, which were only incompletely explored in the first phase of the project.

While this point of view can be defended, it should be noted that the guidelines in their present form do not preclude future investigators from carrying out general population surveys if they feel that it is appropriate or useful to do so. The guidelines in fact provide considerable direction as to how to go about doing so.

It should also be noted that the guidelines do not contain the actual instruments used to collect the data. This was intentional since the collaborators felt that it was preferable to emphasize the process. However, future investigators may wish to have access to the actual instruments. Annotated versions of the original instruments have therefore been prepared and are available through WHO (de Roumanie 1983).

Finally, it should be mentioned that earlier versions of the guidelines were made available to participants in the international meetings held in conjunction with the national meetings in Mexico, Scotland, and Zambia. They proved to be quite helpful in that context.

Assessment of Monitoring Protocol

Another objective of the second phase of the project was "to develop a report on the detailed procedures for monitoring the implementation of plans in these three countries over an extended period of time." A monitoring protocol was prepared for this purpose and has now been published by WHO as part of the guidelines (Rootman and Moser, 1984).

The protocol was drafted in Geneva with the opportunity of input from collaborators through meetings and correspondence. It was felt, however, that in contrast to the guidelines, the monitoring protocol may not have obtained sufficient critical input from collaborators. Nevertheless it represents a reasonable starting point for anyone interested in monitoring the implementation of community and country plans to improve responses to alcohol-related problems.

Assessment of Monitoring in Participating Countries

A third objective of the project was "to study the process of implementation of community and country planning in the original three countries." The final country reports represent a fulfillment of this objective (Rootman 1983, appendix 11).

These reports demonstrate that it was in fact possible for the collaborators to monitor developments related to the community response project at local and national levels in all three countries, and that the monitoring protocol was of some assistance in doing so. The collaborators succeeded in producing a valuable record of attempts to improve community and national responses to alcohol-related problems, which can be useful to others wishing to undertake similar endeavors.

As anyone who reads the final reports will notice, however, there is condiderable variability in the extent and nature of implementation analyses of community and country plans by the three groups of collaborators. They range from very sophisticated analyses of the processes to fairly superficial ones. This range is mainly a result of the differences in resource--both financial and personnel--available to the collaborators in the three countries. On balance, however, the analyses in all three countries add substantially to our understanding of community and national planning.

Assessment of Attempts to Improve Local Responses

As noted in part II, various different approaches were employed in attempts to improve local responses to alcohol-related problems in the communities that participated in the project. Despite their possible impact on improving local responses to alcohol problems, however, these attempts were difficult to sustain in all of the communities, with the possible exception of Edinburgh, where a long-standing committee and network of organizations to deal with alcohol problems were already in place in the community.

The collaborators therefore concluded that it is extremely difficult to develop and implement improved responses to alcohol problems unless structures already exist that could serve as focal points for such responses. Another conclusion drawn was that in certain situations, perhaps especially in developing countries, it is very difficult to sustain interest at local levels in segmented issues, of which alcohol is only one. The collaborators also generally agreed that in action-research projects such as the one carried out, it was necessary for

the project teams to invest greater effort and time in developing and sustaining relationships with the communities.

Assessment of Attempts to Improve National Responses

As described in part II, a major national-level activity for the collaborators in all three countries was the planning and carrying out of national meetings.

It might be noted that these meetings differed somewhat from country to country. In Zambia, for instance, members of the community action groups that had been developed in the three participating communities attended in considerable numbers. The format adopted encouraged much discussion in small groups and sharing of views. A report reflecting these views and containing over 30 specific recommendations for government action was produced and published by the Ministry of Health. The meeting lasted for 2 days.

In contrast, in Scotland, the meeting lasted a day, had no small group discussions, and did not result in specific recommendations for national action. It did, however, include representation from a broad range of community and national interests and heard many different viewpoints expressed.

In Mexico, the 2-day meeting provided opportunities for both formal and informal presentations and resulted in a number of specific recommendations for national action. In common with Scotland, most of the participants were from official agencies that deal with alcohol-related problems.

There is no doubt that these meetings were extremely important and useful events. Not only did they produce recommendations for national action in the countries, but they helped to concentrate the efforts of the collaborators and to mobilize national authorities.

The long-term effects of these meetings, however, are still undetermined, although it is clear that at least some of the recommendations have been implemented. The collaborators should continue to monitor developments so that the long-term effects of the project will be known.

Assessment of International Meetings

Immediately following the national meetings in Mexico, Scotland, and Zambia, international meetings involving participants from neighboring countries who had observed the national meetings took place.

The meeting in Mexico involved participants from six Latin American countries (Argentina, Brazil, Costa Rica, Honduras, Panama, and Venezuela), the one in Zambia from five African countries (Botswana, Kenya, Lesotho, Swaziland, and Tanzania) and the one in Scotland from 10 European countries (France, Germany, Greece, Netherlands, Norway, Poland, Spain, Sweden, U.S.S.R., and United Kingdom).

It was the general consensus of the participants that the three international meetings were extremely valuable. They certainly raised many important issues in relation to the investigation and amelioration of alcohol problems in the participating countries.

As was the case with the national meetings, these meetings differed somewhat from one another. The meetings in Mexico and Zambia, for instance, were much more directed toward how to initiate and carry out a community-response-type project than was the one in Scotland, which focused more on preventive strategies and policies. However, as noted, in all three meetings copies of the guidelines were distributed and participants were encouraged to carry out Background Information Studies as a first step in initiating community-response-type projects. In each meeting, participants from a number of countries suggested that they might be willing to undertake similar projects.

The long-term effects of these international meetings are unknown, although there have been some consequent activities. In particular, there have been requests for further

information from some of the participants, specific proposals for projects, expression of further interest from governments, and the assignment of resources to carry out work similar to that done in the three original countries. In addition, project collaborators from Zambia were asked to share their experiences in recent national meetings in Botswana and Tanzania.

While these signs are certainly encouraging, the hope of establishment of regional networks of collaborators carrying out similar projects has not yet been realized. However, the WHO Regional Office in Europe has made considerable progress in this regard and, in fact, has initiated a project modeled after the project described in this monograph.

Assessment of Liaison Activities

Liaison with participating countries, collaborators, other countries, and with WHO Regional Offices was an important type of activity carried out by WHO Headquarters staff during the course of the project.

With regard to participating countries, it was first necessary to secure agreements to participate in the second phase of the project. Although most of the negotiations were carried out by the national collaborators, WHO officials corresponded with and met with officials in the three countries that participated in the first phase of the project in order to assist in securing their support for a second phase. In all three cases, these efforts proved to be successful although they somewhat delayed the starting of the second-phase activities in the countries. Liaison was also maintained with officials of the three countries throughout the course of the project through correspondence and meetings on various occasions such as the World Health Assembly.

Contact with collaborators was maintained through correspondence, monthly reports, meetings, and visits to the country by WHO officials. As for other countries, correspondence with potential participants in the international meetings was initiated through the three WHO regional offices. In addition, WHO officials from Geneva visited a number of countries in Africa and in Latin America in preparation for these meetings and in following them up.

WHO staff in Geneva also established liaison with a number of agencies such as the Swedish International Development Authority and the Canadian International Development Research Center. This resulted in some additional support being obtained for further activities.

There were, however, many difficulties involved in carrying these liaison activities out effectively. This was not doubt due to the great distances and to the consequent problems of communications. Mail often took several months to arrive, collaborators were often difficult to reach and it was not always feasible to organize meetings. As a result, it was necessary to request several extensions of deadlines for various project products. In spite of these handicaps, however, communication among collaborators, countries, and WHO Regional Offices was adequate to permit succesful completion of the project.

Overall Assessment of the Project

Overall, it would be reasonable to conclude that the impact of the project within the participating countries has been considerable. As demonstrated by chapters 3-5, the project has resulted in an expansion and, in some cases, an explosion in the body of knowledge in the countries regarding alcohol use and its problems. It is apparent also that the project has led to recommendations for improving responses to alcohol problems at both local and national levels in those countries, and to the introduction of certain measures. In addition, it is realistic to expect that further measures will be introduced.

In each of the three countries a group of collaborators has been set up, well-equipped to assess alcohol problems and to assist in the development of appropriate responses to them. In fact, one of the major benefits of the project so far has been the sharing and enlarging of our knowledge and experience in how to study and develop programs and policies to deal with alcohol problems. More widespread interest in alcohol problems has been stimulated in the participating countries, as well as changes in their conceptualization and in the mobilization of resources to deal with them. The fact that all three countries collaborated in

the second phase and are planning subsequent phases is a further demonstration that the project has had a positive impact within the countries.

Interest was shown in the project in a number of other countries even during the early stage of the work. For example, a simplified design was used to carry out a rather similar project in Ontario, Canada. In India, the questionnaire developed for the general population survey was modified for local use, and five communities were involved in planning improved responses to alcohol problems. Steps have been taken to adapt the methods for use in a number of other countries, including Nigeria, Australia, and Papua New Guinea. In the United States, instruments developed in the course of the project have been applied in Alaska and California, and consideration has been given to carrying out similar work in other parts of the country.

As mentioned above, representatives from over 20 countries were nominated to attend as observers to the national meetings in Mexico, Scotland, and Zambia and to participate in the international meetings that followed. The very fact of participation from so many countries demonstrates considerable international interest in the project.

The project has been considered also more broadly, at international and regional levels during WHO meetings and through presentations at gatherings organized by other bodies. In the context of the 1979 meeting of the Expert Committee on Problems Related to Alcohol Consumption (WHO 1980), the design of the project was used in considering the development of public health policies relating to alcohol problems. Examples from the project were incorporated in the background document prepared for discussions between delegates of WHO Member States during the 1982 World Health Assembly. The topic selected for these technical discussions was "Alcohol Consumption and Alcohol-Related Problems," with a focus on the development of national policies and programs, including stimulation of community self-help. To promote more widespread consideration of these matters, arrangements were made for preliminary discussion at national and regional levels and incorporation of the reports in the international background documents. By these means, a large number of countries have now become aware of the possible value and methods involved in undertaking a project on community response to alcohol problems and the implications at national level.

The difficulties encountered on the way are not glossed over. An incalculable amount of time and energy has been expended by the group of collaborators in trying to demonstrate that this complex project on community response to alcohol-related problems is workable and worthwhile. The greatest reward for this effort would be an extension of the work, described in this report, to a widening circle of countries, and a broader application of this experience of action-oriented research to other problems affecting the health, welfare, and development of populations.

FUTURE DIRECTIONS

It is clear from part II that the collaborators and others from the three participating countries will continue in one form or another the work initiated under the project. From the outset, however, it was intended that the experience gained from the project would be spread to other countries and beyond the confines of concern with alcohol problems.

In order to facilitate this spreading of the experience, WHO has recently arranged for the publication of a number of materials resulting from the project. Included are this report, guidelines (Rootman and Moser 1984), a short report on the project by one of the collaborators (Ritson 1985), and annotated instruments arising from the first phase of the project (de Roumanie 1983). In addition, other documents and reports are being made available by WHO on request (see list of project reports and documents).

Collaborators are also being encouraged to publish their own reports and papers resulting from their work. In addition, a group of collaborators are in the process of preparing a book based largely on the analysis of the general population survey data from the first phase. Thus, it is expected that the results of the first and second phases of the project will become widely available over the next few years.

It would be desirable for such written material to be supplemented by opportunities for acquiring experience and possibly training in carrying out a community response project. An obvious source would be the three countries that participated in the original project. In fact, when the project was first designed, it was intended that these countries should

become focal points for the exchange of information on research and training methods and results and for collaborative studies of cross-cultural significance. Thus, countries within the three participating WHO regions may wish to turn to the Mexican, Scottish, and Zambian collaborators for advice and training concerning the project. WHO regional offices are in a position to assist with such training and may be in a position to extend the work to other regions as well.

It is likely that the project will also have repercussions for other projects within the WHO alcohol program, such as the high-priority project on alcohol statistics. Although it is different in its aims and methodology from the Community Response project, it builds directly on the experience of the latter.

Another example is the project on alcohol programs in the employment setting. Although it has its own identity, it does draw from the Community Response project in that some of the same collaborators are involved, and it is likely that the collaborative model used in the Community Response project will be applied in this project as well.

There has been much discussion by WHO Member States of the need to involve communities in investigating their own problems of health, welfare, and development, as well as in seeking and applying appropriate ways of dealing with such problems. The project described in this report provides a concrete example of how such work can be undertaken. The need for collaborative and continuous effort is underlined, and the provision of national support of such endeavors is shown to be essential. Prominence is given to the advantages of sharing experience and learning to adapt techniques to local situations.

In conclusion, the project might be looked on as a model for research and action, involving collaboration at community and national levels, and between research workers, authorities, and service providers. This model could well be adapted to examine other specific problems, or groups of problems, with emphasis on the application of the findings and assessment of the actions taken.

It is hoped that this monograph manages to convey not only the achievements and successes in pursuing the objectives of the project, but also the constraints and mistakes that might be avoided in future endeavors.

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LIST OF PROJECT REPORTS AND DOCUMENTS

1. Rootman, I., and Moser J., eds. Community Response to Alcohol-Related Problems: Phase I. MNH/83.17. Geneva, WHO, 1983.

   This is a 173-page report that includes a full international description of the process and results of phase I. It has 41 annexes, totaling about 1,000 pages, which mainly contain the instruments and instructions developed by the collaborators of phase I. A copy of the report without annexes can be obtained on request from the Division of Mental Health, World Health Organization, 1211 Geneva 27, Switzerland. Annexes, as well as a July 1981 draft of the report, can be obtained from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

2. Ritson, E.B. Community Response to Alcohol-Related Problems: Review of an International Study. Public Health Papers No. 81. Geneva: WHO, 1985.

   This report gives an overall view of phase I's results in about 60 pages. It can be obtained from the WHO Publications Center USA, 49 Sheridan Avenue, Albany, N.Y. 12210, or from Distribution and Sales, World Health Organization, 1211 Geneva 27, Switzerland. (Translations into French, Spanish, and Arabic in preparation.)

3. Calderon, G.; Campillo, C.; and Suarez, C. Respuestas de la Comunidad ante los Problema Relacionados Con Alcohol. Mexico City: Instituto Mexicano de Psiquiatria, 1981.

   This is a 200-page report on the first phase of the project in Mexico in Spanish. It is available on request from the Instituto Mexicano de Psiquiatria. An English translation titled Community Response to Alcohol-Related Problems: Mexico is available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

4. Ritson, E.B.; de Roumanie, M.; and Kendrick, S. Community Response to Alcohol-Related Problems: Scotland . Edinburgh: Dept. of Psychiatry, University of Edinburgh, 1981.

   This is a 432-page final report on the first phase of the project in Scotland. It is available on request from the Department of Psychiatry, University of Edinburgh, Edinburgh, Scotland or the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

5. Ritson, E.B.; de Roumanie, M.; and Kendrick, S. Community Response to Alcohol-Related Problems in Lothian. Edinburgh: Dept. of Psychiatry, University of Edinburgh, 1981.

   This is a 50-page summary of no. 4 available from the same sources.

6. Haworth, A.; Mwanalushi, M.; and Todd, D. Community Response to Alcohol-Related Problems in Zambia. Lusaka: Institute for African Studies, University of Zambia, 1981.

   This is a 570-page final report on the first phase of the Zambian project. It is published in seven separate volumes as Community Health Research Reports. There is also a 23-page summary by A. Haworth and R. Serpell. Both are available from the Institute for African Studies, University of Zambia, Lusaka, Zambia. The full report is also available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

7. Rootman, I., ed. Community Response to Alcohol-Related Problems: Phase II. MNH/83.18. Geneva: WHO, 1983.

   This is a 14-page report on the second phase of the community response project. The report includes as appendixes a draft of guidelines for carrying out similar sorts of projects, final reports on the second phase of the project from the three participating countries (about 500 pages), and proposals for a third phase of a community response project. The report without appendixes can be obtained on request from the Division of Mental Health, World Health Organization, 1211 Geneva 27, Switzerland. The report including appendixes can be obtained from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

8. Rootman, I., and Moser, J. Guidelines for Investigating Alcohol Problems and Developing Appropriate Responses. WHO Offset Publication No. 81. Geneva: WHO, 1984.

   This report describes and offers suggestions for evaluating the usefulness of the whole range of methods used in the community response project, plus a few that were not used. It is designed as a handbook for those wishing to design their own community project. No instruments are included. It can be obtained from the WHO Publications Center USA, 49 Sheridan Avenue, Albany, N.Y. 12210, or from Distribution and Sales, World Health Organization, 1211 Geneva 27, Switzerland, or from World Health Organization publication distributors. (Also available in Spanish. French and Arabic translations in preparation.)

9. de Roumanie, M. Community Response to Alcohol Problems: Instrument Package. MNH MNH/83.33. Geneva: WHO, 1983.

   This is a minimally revised set of instruments used in phase I of the Community Response Project along with commentary on questions. It can be obtained on request from the Division of Mental Health, World Health Organization, 1211 Geneva 27, Switzerland.

10. Roizen, R., et al. "A Cross-Cultural Study of Alcohol in Four Countries." Berkeley: Alcohol Research Group, unpublished.

    This is a cross-cultural analysis of the general population survey data from Mexico, Scotland, and Zambia as well as a comparable survey from the United States. It is anticipated that it will be published by a commercial publishing house. In the meantime, it is available through the Alcohol Research Group, 1816 Scenic Avenue, Berkeley, CA 94709.

LIST OF ANNEXES TO FINAL REPORTS

PHASE I FINAL REPORT[1]

1 Outline for Collation of Existing Information

2 General Population Survey Interview Form

3 General Population Survey Instructions to Interviewers

4 General Population Survey Coding Instructions

5 Sampling

6 Plan of Data Analysis

7 Guidelines for the Analysis of General Population Survey Data

8 Description of Variables: Survey of General Population

9 Coding and Recoding the 7-Day Drinking Experience

10 List of Tables to be Produced for those Chapters Listed on Page 17 of "Guidelines for the Analysis of General Population Survey Data"

11 Guidelines: Substudies of Agents and Agencies and Persons Identified as Having Alcohol-Related Problems

12 Agents' Interview Form (specialized)

13 Agency Interview Form: Notes to Collaborators/Interviewers

14 Agency Interview Form (specialized): Coding Instructions

15 Agents' Interview Form (nonspecialized)

16 Agency Interview Form (nonspecialized): Coding Instructions

17 Guidelines for the Analysis of Data Deriving from the Case Report Form, Screening Annex, Clients' Form, and Agents' Interview Form

18 Case Report Form (police departments only)

19 Case Report Form (police departments only): Instructions to Interviewers

20 Case Report Form (police departments only): Coding Instructions

21 Case Report Form (with Screening Annex)

22 Case Report Form (with Screening Annex): Instructions to Interviewers

23 Case Report Form (with Screening Annex): Notes to Collaborators

24 Case Report Form (with Screening Annex): Interviewer and Coding Instructions

25 Client Interview Form

26 Client Interview Form: Notes to Collaborators

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[1] Rootman, I., and Moser, J., eds. Community Response to Alcohol-Related Problems: Phase I. MNH/83.17. Geneva: WHO, 1983.

27 Client Interview Form: Notes to Interviewers

28 Client Interview Form: Interviewer and Coding Instructions

29 Observational Studies

30 Observational Studies into Alcohol-Related Problems

31 A Note on Observational Studies of Drinking and Community Responses

32 The Project as Agent of Change: Notes on Some Questions to be Addressed Immediately

33 Overview of a Community Health Planning Process

34 Formulation of Community Plans: Questions to be Posed to the Research Data

35 Guidelines for the Final Country Report

36 Previous WHO Activities Relevant to the Project

37 Participants in Community Response Project Working Groups

38 Research and Findings in Scotland

39 Research and Findings in Mexico

40 Research and Findings in Zambia

41 A Preliminary Cross-Cultural Analysis of the General Population Data Collected as Part of the WHO Project on Community Response to Alcohol-Related Problems.

PHASE II FINAL REPORT[2]

I. Guidelines for Investigating Alcohol Problems and Developing Appropriate Responses
   1. Collation of Existing Information
   2. Key Informant Studies
   3. Observational Studies
   4. General Population Survey
   5. Special Population Studies
   6. Reporting Systems
   7. Types of Responses to Alcohol Problems
   8. Protocol for Monitoring Responses to Alcohol-Related Problems

II. Report on Monitoring Responses to Alcohol-Related Problems
   1. Monitoring Protocol
   2. Supporting Materials: Mexico
      2.1 Final Report Phase II
      2.2 National Conference Report: Part II
   3. Supporting Materials: Scotland
      3.1 Final Report Phase II
      3.2 Feasability Study: Plan for Lothian Region
      3.3 National Conference Report: Parts I and II
   4. Supporting Materials: Zambia
      4.1 Final Report Phase II
      4.2 Excerpts from Progress Report: Phase II
      4.3 National Conference Report: Part I
      4.4 National Conference Report: Part II

III. Proposals for a Third Phase of a Community Response to Alcohol Problems Project

[2]Rootman, I., ed. Community Response to Alcohol-Related Problems: Phase II. MNH/83.18. Geneva: WHO, 1983.

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